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* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	AUG 10	Time limit for inactive STN sessions doubles to 40 minutes
NEWS	3	AUG 18	COMPENDEX indexing changed for the Corporate Source (CS) field
NEWS	4	AUG 24	ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced
NEWS	5	AUG 24	CA/CAPLUS enhanced with legal status information for U.S. patents
NEWS	6	SEP 09	50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY
NEWS	7	SEP 11	WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus
NEWS	8	OCT 21	Derwent World Patents Index Coverage of Indian and Taiwanese Content Expanded
NEWS	9	OCT 21	Derwent World Patents Index enhanced with human translated claims for Chinese Applications and Utility Models
NEWS	10	NOV 23	Addition of SCAN format to selected STN databases
NEWS	11	NOV 23	Annual Reload of IFI Databases
NEWS	12	DEC 01	FRFULL Content and Search Enhancements
NEWS	13	DEC 01	DGENE, USGENE, and PCTGEN: new percent identity feature for sorting BLAST answer sets
NEWS	14	DEC 02	Derwent World Patent Index: Japanese FI-TERM thesaurus added
NEWS	15	DEC 02	PCTGEN enhanced with patent family and legal status display data from INPADOCDB
NEWS	16	DEC 02	USGENE: Enhanced coverage of bibliographic and sequence information
NEWS	17	DEC 21	New Indicator Identifies Multiple Basic Patent Records Containing Equivalent Chemical Indexing in CA/CAPLUS
NEWS	18	JAN 12	Match STN Content and Features to Your Information Needs, Quickly and Conveniently
NEWS	19	JAN 25	Annual Reload of MEDLINE database

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 10:59:25 ON 12 FEB 2010

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.22

0.22

FILE 'REGISTRY' ENTERED AT 10:59:40 ON 12 FEB 2010

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 10 FEB 2010 HIGHEST RN 1205743-44-7

DICTIONARY FILE UPDATES: 10 FEB 2010 HIGHEST RN 1205743-44-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>Testing the current file.... screen

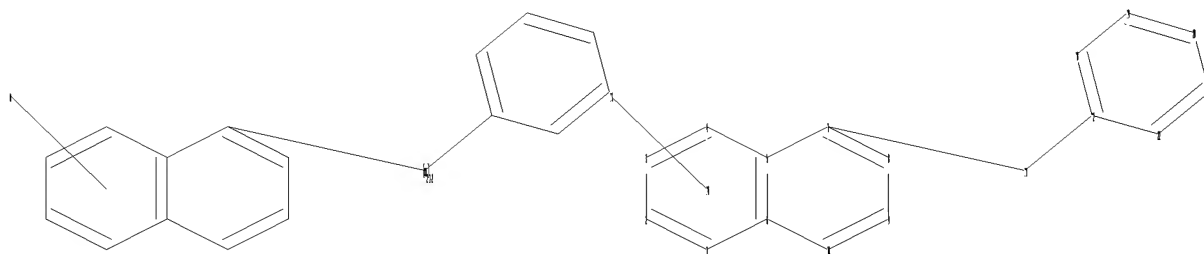
ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L1 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\QUERIES\105537312.str



```

chain nodes :
11 13
ring nodes :
1 2 3 4 5 6 7 8 9 10 12 18 19 20 21 22
chain bonds :
7-11 11-12
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20
20-21 21-22
exact bonds :
7-11 11-12
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20
20-21 21-22
isolated ring systems :
containing 1 :

```

```

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 18:CLASS 19:CLASS 20:CLASS
21:CLASS 22:CLASS

```

L2 STRUCTURE UPLOADED

=> que L2 AND L1

L3 QUE L2 AND L1

=> s 13

SAMPLE SEARCH INITIATED 10:59:56 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 30196 TO ITERATE

6.6% PROCESSED 2000 ITERATIONS
 INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
 SEARCH TIME: 00.00.01

7 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**
 PROJECTED ITERATIONS: 593522 TO 614318
 PROJECTED ANSWERS: 1497 TO 2729

L4 7 SEA SSS SAM L2 AND L1

```
=> s 13 full
FULL SEARCH INITIATED 11:00:00 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 604608 TO ITERATE
```

```
100.0% PROCESSED 604608 ITERATIONS 3300 ANSWERS
SEARCH TIME: 00.00.05
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```
L5 3300 SEA SSS FUL L2 AND L1
```

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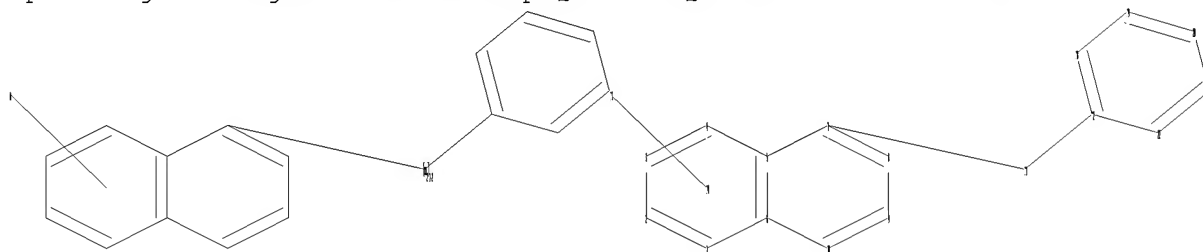
```
ENTER SCREEN EXPRESSION OR (END):end
```

```
=> screen 1841
```

```
L6 SCREEN CREATED
```

```
=>
```

```
Uploading C:\Program Files\Stnexp\Queries\QUERIES\105537312.str
```



```
chain nodes :
11 13
ring nodes :
1 2 3 4 5 6 7 8 9 10 12 18 19 20 21 22
chain bonds :
7-11 11-12
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20
20-21 21-22
exact bonds :
7-11 11-12
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20
20-21 21-22
isolated ring systems :
containing 1 :
```

```
Match level :
```

```
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 18:CLASS 19:CLASS 20:CLASS
21:CLASS 22:CLASS
```

L7 STRUCTURE UPLOADED

=> que L7 AND L6

L8 QUE L7 AND L6

=> s l8 subset=15 full

FULL SUBSET SEARCH INITIATED 11:01:04 FILE 'REGISTRY'

FULL SUBSET SCREEN SEARCH COMPLETED - 1106 TO ITERATE

100.0% PROCESSED 1106 ITERATIONS

792 ANSWERS

SEARCH TIME: 00.00.01

L9 792 SEA SUB=L5 SSS FUL L7 AND L6

=> s l5 not l9

L10 2508 L5 NOT L9

=>Testing the current file.... screen

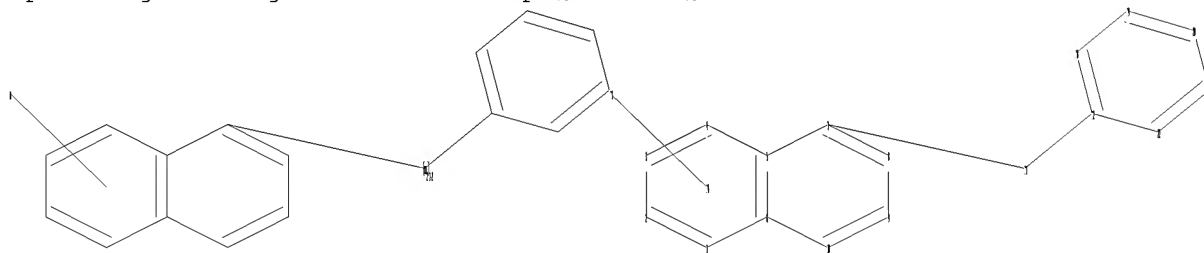
ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L11 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\QUERIES\105537312.str



chain nodes :

11 13

ring nodes :

1 2 3 4 5 6 7 8 9 10 12 18 19 20 21 22

chain bonds :

7-11 11-12

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20
20-21 21-22

exact bonds :

7-11 11-12

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20
20-21 21-22

isolated ring systems :

containing 1 :

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 18:CLASS 19:CLASS 20:CLASS
21:CLASS 22:CLASS

L12 STRUCTURE UPLOADED

=> que L12 AND L11

L13 QUE L12 AND L11

=> s l13 subset=15 full

FULL SUBSET SEARCH INITIATED 11:01:46 FILE 'REGISTRY'

FULL SUBSET SCREEN SEARCH COMPLETED - 2664 TO ITERATE

100.0% PROCESSED 2664 ITERATIONS

2018 ANSWERS

SEARCH TIME: 00.00.01

L14 2018 SEA SUB=L5 SSS FUL L12 AND L11

=> s l5 not l14

L15 1282 L5 NOT L14

=> s l15 and l10

L16 1078 L15 AND L10

=> s l16 and caplus/lc

70119723 CAPLUS/LC

L17 983 L16 AND CAPLUS/LC

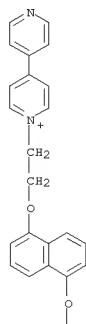
=> s l16 not l17

L18 95 L16 NOT L17

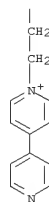
=> d l18 90-95

L18 ANSWER 90 OF 95 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 210976-95-7 REGISTRY
 ED Entered STN: 09 Sep 1998
 CN 4,4'-Bipyridinium, 1-[2-[[5-(2-[4,4'-bipyridinium]-1-yloxy)-1-naphthalenyl]oxy]ethyl]- (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 4,4'-Bipyridinium, 1,1'-[1,5-naphthalenediylbis(oxy-2,1-ethanediyl)]bis- (9CI)
 MF C34 H30 N4 O2
 CI CCM
 SR CA

PAGE 1-A

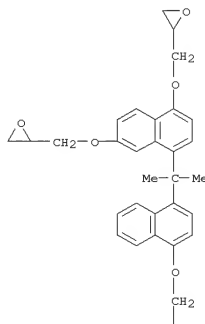


PAGE 2-A



L18 ANSWER 91 OF 95 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 151809-65-3 REGISTRY
 ED Entered STN: 17 Dec 1993
 CN Oxirane, 2,2'-[[4-[1-methyl-1-[(4-(oxiranylmethoxy)-1-naphthalenyl]ethyl]-1,6-naphthalenediyl]bis(oxymethylene)]bis- (9CI) (CA INDEX NAME)
 MF C32 H32 O6
 CI CCM
 SR CA

PAGE 1-A



PAGE 2-A

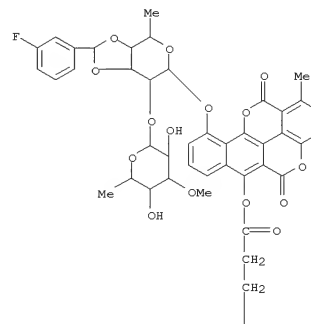


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L18 ANSWER 90 OF 95 REGISTRY COPYRIGHT 2010 ACS on STN (Continued)

L18 ANSWER 92 OF 95 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 123879-06-1 REGISTRY
 ED Entered STN: 23 Nov 1989
 CN 1-Pyrrolidinepropanoic acid, 10-[[[6-deoxy-2-O-(6-deoxy-3-O-methyl- α -D-galactopyranosyl)-3,4-O-[(3-fluorophenyl)methylene]- β -D-galactopyranosyl]oxy]-5,12-dihydro-1-methyl-5,12-dioxobenzo[h][1]benzopyrano[5,4,3-cde][1]benzopyran-6-yl ester, (R)- (9CI)
 (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 4H-1,3-Dioxolo[4,5-c]pyran, 1-pyrrolidinepropanoic acid deriv.
 CN Benzo[h][1]benzopyrano[5,4,3-cde][1]benzopyran, 1-pyrrolidinepropanoic acid deriv.
 MF C46 H46 F N O15
 CI CCM
 SR CA

PAGE 1-A

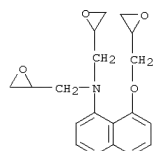


PAGE 2-A



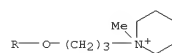
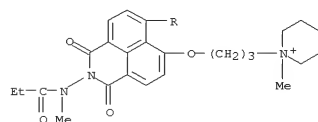
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L18 ANSWER 93 OF 95 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 119176-99-7 REGISTRY
 ED Entered STN: 17 Feb 1989
 CN 2-Oxiranemethanamine, N-[8-(2-oxiranylmethoxy)-1-naphthalenyl]-N-(2-oxiranylmethyl)- (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Oxiranemethanamine, N-[8-(oxiranylmethoxy)-1-naphthalenyl]-N-(oxiranylmethyl)- (9CI)
 MF C19 H21 N O4
 CI CCM
 SR CA

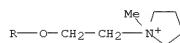
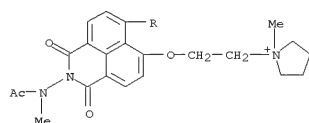


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L18 ANSWER 94 OF 95 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 70054-79-4 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Piperidinium, 1,1'-[[2,3-dihydro-2-[methyl(1-oxopropyl)amino]-1,3-dioxo-1H-benz[de]isoquinoline-6,7-diyl]bis(oxy-3,1-propanediyl)]bis[1-methyl- (9CI)
 (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1H-Benz[de]isoquinoline, piperidinium deriv.
 MF C34 H50 N4 O5
 CI CCM



L18 ANSWER 95 OF 95 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 70054-77-2 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Pyrrolidinium, 1,1'-[[2-(acetylmethylamino)-2,3-dihydro-1,3-dioxo-1H-benz[de]isoquinoline-6,7-diyl]bis(oxy-2,1-ethanediyl)]bis[1-methyl- (9CI)
 (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1H-Benz[de]isoquinoline, pyrrolidinium deriv.
 MF C29 H40 N4 O5
 CI CCM



=> fil caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	302.60	302.82

FILE 'CAPLUS' ENTERED AT 11:02:53 ON 12 FEB 2010
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FILE COVERS 1907 - 12 Feb 2010 VOL 152 ISS 8
FILE LAST UPDATED: 11 Feb 2010 (20100211/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

L17 983 S L16 AND CAPLUS/LC
L18 95 S L16 NOT L17

FILE 'CAPLUS' ENTERED AT 11:02:53 ON 12 FEB 2010

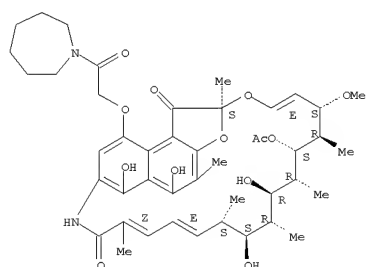
=> s l17
L19 714 L17

=> d ibib abs hitstr 700-714

L19 ANSWER 700 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1972:547920 CAPLUS
 DOCUMENT NUMBER: 77:147920
 ORIGINAL REFERENCE NO.: 77:24291a,24294a
 TITLE: Rifamycin derivatives strongly inhibiting RNA.far.DNA polymerase (reverse transcriptase) of murine sarcoma viruses
 AUTHOR(S): Gurgo, Corrado; Ray, Ranjit; Green, Maurice
 CORPORATE SOURCE: Sch. Med., St. Louis Univ., St. Louis, MO, USA
 SOURCE: Journal of the National Cancer Institute (1940-1978) (1972), 49(1), 61-79
 CODEN: JNCIAM; ISSN: 0027-8874
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Among 180 rifamycin SV and B derivs. tested for their activity against reverse transcriptase [9068-38-6] of the murine sarcoma virus, 9 produced 80-100% inhibition at 5-20 µg/ml, and 16 caused 40-60% inhibition at 20 µg/ml. All but 2 of the 25 active derivs. had large side chains in the 3 position of the rifamycin SV mol. Among these, 3-[(diphenylhydrazono)methyl]rifamycin SV (I) [36674-84-7], 3-[(cyclopentadecylhydrazono)methyl]rifamycin SV (II) [38855-47-9], 3-[(cyclooctylidenehydrazono)methyl]rifamycin SV (III) [36556-78-2], and 3-[[[n-octyloxy]imino]methyl]rifamycin SV (IV) [35225-13-9] caused >50% inhibition at <10 µg/ml.
 IT 13929-37-8 38123-13-6 38123-14-7
 38123-15-8 38123-17-0 38123-18-1
 RL: PRP (Properties)
 (reverse transcriptase of sarcoma virus inhibition by)
 RN 13929-37-8 CAPLUS
 CN Rifamycin, 4-O-[2-(hexahydro-1H-azepin-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

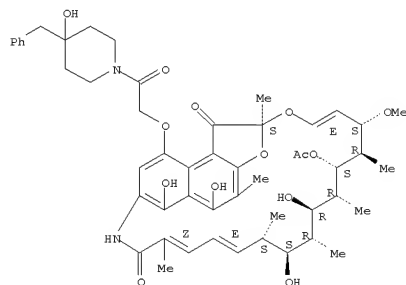
Absolute stereochemistry.
 Double bond geometry as described by E or Z.



RN 38123-13-6 CAPLUS
 CN Rifamycin, 4-O-[2-(3,3-dimethyl-1-azetidiny)-2-oxoethyl]- (9CI) (CA INDEX NAME)

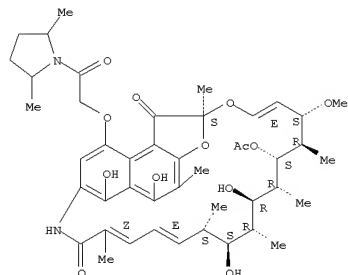
L19 ANSWER 700 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.



RN 38123-17-0 CAPLUS
 CN Rifamycin, 4-O-[2-(2,5-dimethyl-1-pyrrolidinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.

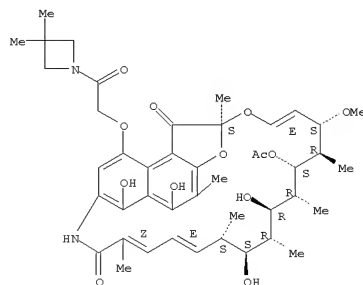


RN 38123-18-1 CAPLUS
 CN Rifamycin, 4-O-[2-(3-methyl-4-morpholinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

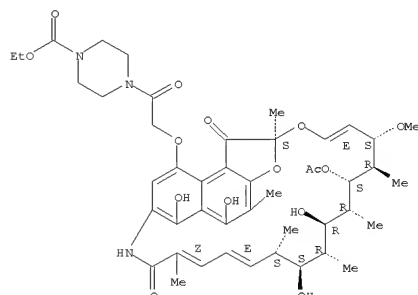
L19 ANSWER 700 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.



RN 38123-14-7 CAPLUS
 CN Rifamycin, 4-O-[2-[4-(ethoxycarbonyl)-1-piperazinyl]-2-oxoethyl]- (9CI) (CA INDEX NAME)

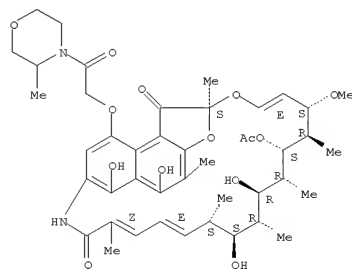
Absolute stereochemistry.
 Double bond geometry as described by E or Z.



RN 38123-15-8 CAPLUS
 CN Rifamycin, 4-O-[2-[4-hydroxy-4-(phenylmethyl)-1-piperidinyl]-2-oxoethyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 700 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
 (1 CITINGS)

L19 ANSWER 701 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1972:34017 CAPLUS
 DOCUMENT NUMBER: 76:34017
 ORIGINAL REFERENCE NO.: 76:5507a,5510a
 TITLE: 1,1'-(Naphthylenedioxy)bis-[3-(isopropylamino)-2-propanol]dihydrochlorides and tetrahydronaphthylenedioxy analogs
 INVENTOR(S): Nauta, Wijbe T.
 PATENT ASSIGNEE(S): N. V. Koninklijke Pharmaceutische Fabrieken voorheen Brocades-Stheeman en Pharmacia
 SOURCE: Ger. Offen., 23 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

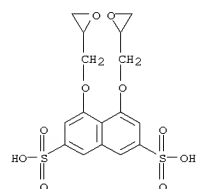
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2114019	A	19711104	DE 1971-2114019	19710323
GB 1307903	A	19730221	GB 1970-14345	19700324
BE 764721	A1	19710923	BE 1971-101319	19710323
NL 7103907	A	19710928	NL 1971-3907	19710323
FR 2085739	A5	19711231	FR 1971-10436	19710324
FR 2085739	A1	19711231		
PRIORITY APPLN. INFO.:			GB 1970-14345	A 19700324
			GB 1970-14347	A 19700324

AB Seven title compds. (iso-PrNHCH₂CH(OH)-CH₂O)2X.2HCl (I) (X=5,6,7,8-tetrahydro-2,3-naphthylene, 1,8-, 1,2-, 1,4-, 1,5-, and 2,6-naphthylene) with antiarrhythmic, β -sympatholytic, and local anesthetic activity were prepared e.g. from (ClCH₂CH(OH)CH₂O)2X (II) and excess iso-PrNH₂ (III) in a sealed tube or from the corresponding 1,1'-(naphthylenedioxy)bis(2,3-epoxypropane) (IV) and III. II and IV were prepared by reaction of X(OH)₂ with epichlorohydrin in the presence of NaOH or piperidine under N. Thus, aqueous NaOH was added to a solution of 1,8-dihydroxynaphthalene in epichlorohydrin under N and the mixture stirred 16 hr at 80° and 24 hr at 100° to give 1,1'-(naphthylene-1,8-dioxy)bis(2,3-epoxypropane) which was heated with III in C₆H₆ 20 hr at 80° and subsequently treated with HCl to give I (X=1,8-naphthylene).
 IT 27610-47-5P 34899-01-9P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 27610-47-5 CAPLUS
 CN Oxirane, 2,2'-[1,5-naphthalenediylbis(oxymethylene)]bis- (9CI) (CA INDEX NAME)

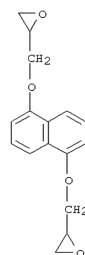
L19 ANSWER 702 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1970:121344 CAPLUS
 DOCUMENT NUMBER: 72:121344
 ORIGINAL REFERENCE NO.: 72:121807a,21810a
 TITLE: Water-soluble epoxy compounds
 INVENTOR(S): Yoshida, Toshio; Nishi, Ei-jiro; Takenaka, Toshio
 PATENT ASSIGNEE(S): Taika Dyestuff Manufg. Co., Ltd.
 SOURCE: Jpn. Tokkyo Koho, 3 pp.
 CODEN: JAXXAD
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 45004742	B4	19700217	JP	19650901

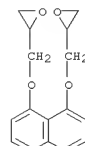
GI For diagram(s), see printed CA Issue.
 AB The title compds. (I) were prepared. Thus, 110 g 97% H₂SO₄ was gradually added to 98 g molten PhOH at 40° with stirring and the mixture heated to 100° in 1 hr, stirred 1 hr at the same temperature, 200 g ice added, the mixt neutralized with 20% NaOH, 400 g epichlorohydrin added at 40-50°, the solution heated to 70° in 1 hr, 220 g 20% NaOH added, and the solution stirred 2 hr at 90-100° to give 400 g Na glycidylbenzene-sulfonate. Similarly were prepared the glycidyl ethers of Na 1-hydroxy-2-chloro-4-benzenesulfonate, Na 4-tert-butyl-2-hydroxy-2-benzenesulfonate, and 2-hydroxy-3,6-naphthalenedisulfonate, and the bis(glycidyl ethers) of resorcinol monosulfonate and 1,8-dihydroxy-3,6-naphthalenedisulfonate.
 IT 26564-67-0P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 26564-67-0 CAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 4,5-bis(2-oxiranylmethoxy)- (CA INDEX NAME)



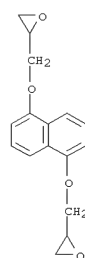
L19 ANSWER 701 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



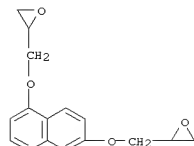
RN 34899-01-9 CAPLUS
 CN Oxirane, 2,2'-[1,8-naphthalenediylbis(oxymethylene)]bis- (9CI) (CA INDEX NAME)



L19 ANSWER 703 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1970:56177 CAPLUS
 DOCUMENT NUMBER: 72:56177
 ORIGINAL REFERENCE NO.: 72:10305a,10308a
 TITLE: Thermal analysis of nitro-substituted epoxide polymers
 AUTHOR(S): Fleming, Gerald J.
 CORPORATE SOURCE: U. S. Nav. Ordnance Lab., Silver Spring, MD, USA
 SOURCE: Journal of Applied Polymer Science (1969), 13(12), 2579-92
 CODEN: JAPNAB; ISSN: 0021-8995
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The thermal properties of a number of nitro-substituted and analogous non-nitrosusbstituted epoxide polymers were studied. Dramatic increases in char yield and decreases in maximum rate of weight loss were observed for the nitrosusbstituted systems compared to their non-nitrated analogs. These effects were enhanced when highly functional and highly aromatic epoxide resins were used. The sample size and heating rate employed had pronounced effects upon the amount of char formed during thermal degradation. Anal. of char residues indicates ring formation for the nitro-substituted systems during pyrolysis.
 IT 27610-47-5P 27610-48-6P
 RL: PREP (Preparation) (cured by nitro compds., char yield and thermal properties of)
 RN 27610-47-5 CAPLUS
 CN Oxirane, 2,2'-[1,5-naphthalenediylbis(oxymethylene)]bis- (9CI) (CA INDEX NAME)

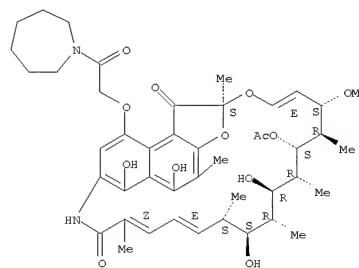


RN 27610-48-6 CAPLUS
 CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)



L19 ANSWER 704 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1968:29626 CAPLUS
 DOCUMENT NUMBER: 68:29626
 ORIGINAL REFERENCE NO.: 68:5743a, 5746a
 TITLE: Chemical modifications and biological properties of rifamycins
 AUTHOR(S): Sensi, Piero; Maggi, Nicola; Furesz, S.; Maffii, Giulio
 CORPORATE SOURCE: Lepetit S.P.A., Milan, Italy
 SOURCE: Antimicrobial Agents and Chemotherapy (1961-70) (1966)
 CODEN: AACHAX; ISSN: 0074-9923
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Rifamycin B, one of the metabolic products of *Streptomyces mediterranei*, was converted, by splitting off the glycolic acid moiety, into rifamycin SV, an antibiotic widely employed in the parenteral treatment of biliary tract infections, staphylococcal and other gram-pos. infections, tuberculosis, and leprosy. Many other chemical modifications of rifamycin B were performed in attempts to increase oral absorption, efficacy in the treatment of tuberculous infections, and activity against gram-negative bacteria. Modifications have been introduced in the aliphatic bridge, in the glycolic chain, and in the chromophoric nucleus. 46 references.
 IT 13929-37-8
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (bactericidal action of)
 RN 13929-37-8 CAPLUS
 CN Rifamycin, 4-O-[2-(hexahydro-1H-azepin-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

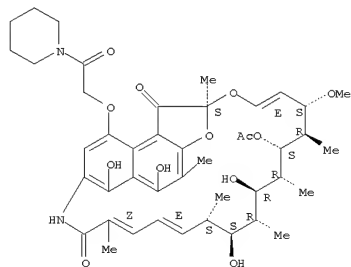
Absolute stereochemistry.
 Double bond geometry as described by E or Z.



IT 14487-04-8P

L19 ANSWER 704 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
 RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)
 RN 14487-04-8 CAPLUS
 CN Rifamycin, 4-O-[2-oxo-2-(1-piperidinyl)ethyl]- (9CI) (CA INDEX NAME)

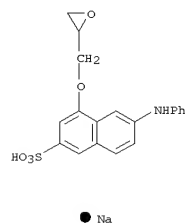
Absolute stereochemistry.
 Double bond geometry as described by E or Z.



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
 (4 CITINGS)

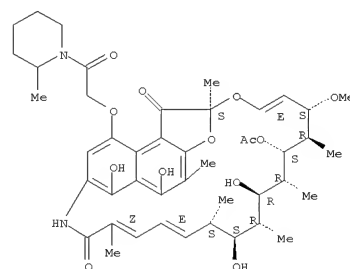
L19 ANSWER 705 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1966:491230 CAPLUS
 DOCUMENT NUMBER: 65:91230
 ORIGINAL REFERENCE NO.: 65:17107E-h, 17108a-b
 TITLE: Reactions of γ -chloro- β -hydroxypropyl derivatives. IV. Coloration of animal fibers through their N-, N,N-, or O-(β , γ -epoxypropyl) derivatives
 AUTHOR(S): Kutkevicius, S.; Lakstauskas, J.; Pesyte, M.
 SOURCE: Lietuvos TSR Aukstujų Mokyklų Mokslų Darbai, Chem. ir Chem. Technol. (1965), 7, 53-60
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB cf. CA 64, 3471g. An animal fiber is treated with an aryl N-, N,N-, or O-(epoxypropyl) compound. This results in the inclusion of a group such as $\text{RN}[\text{CH}_2\text{CH}(\text{OH})\text{CH}_2]_2$ in the fiber (R = aryl). The fiber thus modified is then treated with a diazonium salt that condenses with the aryl group to form a dye which is an integral part of the fiber and colors it with a brightness and fastness equal to that given by reactive dyes. Ten modifying compds. are used: N-methyl-N-(β , γ -epoxypropyl)aniline (I); N,N-bis(β , γ -epoxypropyl)aniline (II); N-ethyl-N-(β , γ -epoxypropyl)-1-naphthylamine (III); N,N-bis(β , γ -epoxypropyl)-1-naphthylamine (IV); N-(β , γ -epoxypropyl)diphenylamine (V); 4-(β , γ -epoxypropoxy)diphenylamine (VI); N-(β , γ -epoxypropyl) 1,2,3,4-tetrahydrobenzo[h]quinoline (VII); N-(β , γ -epoxypropyl)-1,2,3,4-tetrahydro-3-hydroxybenzo[h]quinoline (VIII); N-(β , γ -epoxypropyl)-1-naphthylamine-4-sulfonate (IX); and 4-(β , γ -epoxypropoxy)-O-anilino-2-naphthalenesulfonic acid (X). The prepn. of VIII is by the action of NaOH on N-(γ -chloro- β -hydroxypropyl)-1,2,3,4-tetrahydro-3-hydroxybenzo[h]quinoline and that of IX similarly from Na N-(p-chloro- β -hydroxypropyl)-1-naphthylamine-4-sulfonate. The preparation of X is effected at room temperature in alkaline solution from 4,6,2-HO(H₂N)C₁₀H₅SO₃H and epichlorohydrin, and VI is obtained analogously. Fiber modification is brought about by treatment with 1-3% by weight of one of the modifiers I-X in H₂O for 0.5-2 h. at 75-85°, with a bath ratio of 20:1; if the modifier is insol., it is dispersed instead with 2-5% on fiber weight of the auxiliary OP-10; this treatment is followed by washing with water containing OP-10 at 80-90°; freedom after washing from the modifier is tested by extraction with organic solvents. Alternatively, a rapid method of impregnation of the fiber with 10-15% of a solution or dispersion of the modifier in H₂O or in H₂O/alc. followed by drying at 100-5° and heating at 105-40° for 1-5 min. and washing at 80-90° can be used. Five diazotized amines were used for coupling to the modified fiber; the amines were: p-chloroaniline; 4-nitro-2,6-dibromoaniline; p-nitroaniline (XI); 4-nitro-1-naphthylamine; and 2,4-dinitroaniline (XII). Coupling was effected by treating the modified fiber with 1-3% by weight of diazonium salt with a bath: fiber ratio of 30:1 at 10-17° for 0.5-5 min.; and then washing with an aqueous solution of OP-10 at 60-75°. The colors produced in the fiber by various combinations of modifier and amine (used successively) are shown in a table. Fastness of shade was tested towards dry rubbing, wet rubbing, water, soap, and perspiration

L19 ANSWER 705 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
 (best 5, poorest 1). Two dyeings (III and XI, and III and XII) gave only
 3 to wet rubbing, all other tests gave 4 or 5; thus, fastness generally
 was excellent. The possibility of a continuous process for fiber
 modification and coloration is envisaged.
 IT 14236-09-0, 2-Naphthalenesulfonic acid,
 6-anilino-4-(2,3-epoxypropoxy)-, sodium salt
 (animal-fiber coloration or dyeing with diazonium salts and)
 RN 14236-09-0 CAPLUS
 CN 2-Naphthalenesulfonic acid, 4-(2-oxiranylmethoxy)-6-(phenylamino)-,
 sodium
 salt (1:1) (CA INDEX NAME)



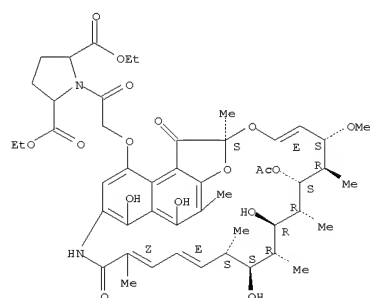
L19 ANSWER 706 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1964:461682 CAPLUS
 DOCUMENT NUMBER: 61:61682
 ORIGINAL REFERENCE NO.: 61:10686d-g
 TITLE: Rifamycins. XXXV. Amides and hydrazides of rifamycin
 B
 AUTHOR(S): Sensi, P.; Maggi, N.; Ballotta, R.; Furesz, S.;
 Pallanza, R.; Arioli, V.
 CORPORATE SOURCE: Res. Labs., Lepetit, Milan
 SOURCE: Journal of Medicinal Chemistry (1964), 7(5), 596-602
 CODEN: JMCMAR; ISSN: 0022-2623
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 GI For diagram(s), see printed CA Issue.
 AB of. CA 58, 1304d. It is known that by splitting off the glycolic acid
 moiety from the mol. rifamycin B (I) the antimicrobial activity increases
 dramatically in rifamycin S and rifamycin SV (II). Starting from the
 hypothesis that the presence of a free carboxyl group in I might forbid
 the display of the activity, a series of amides and hydrazides of I has
 been prepared by allowing I to react with amines or hydrazines in the
 presence of dicyclohexylcarbodiimide as dehydrating agent. Anal. data
 and
 antibacterial activities of 49 amides and 26 hydrazides are reported.
 Among them, the N,N-disubstituted rifamycinamides and the
 N,N,N'-trisubstituted rifamycinhydrazides appear to possess considerable
 antibacterial activity against grampos. bacteria and Mycobacterium
 tuberculosis, of the same order of II. The in vivo activity of some
 rifamycinamides and rifamycinhydrazides in exptl. staphylococcal
 infection
 in mice is very high and in some cases higher than that of II. The acute
 toxicity of a series of derivs. of I is also reported.
 IT 26242-19-3 106885-71-6
 (Derived from data in the 7th Collective Formula Index (1962-1966))
 RN 26242-19-3 CAPLUS
 CN Rifamycin, 4-O-[2-(2-methyl-1-piperidinyl)-2-oxoethyl]- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.



L19 ANSWER 706 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
 RN 106885-71-6 CAPLUS
 CN 2,5-Pyrrolidinedicarboxylic acid, 1-[[[(1,2-dihydro-5,6,17,19,21-
 pentahydroxy-23-methoxy-2,4,12,16,18,20,22-heptamethyl-1,11-dioxo-2,7-
 (epoxypentadeca[1,11,13]trienimino)naphthol[2,1-b]furan-9-yl)oxy]acetyl]-,
 diethyl ester, 21-acetate (7CI) (CA INDEX NAME)

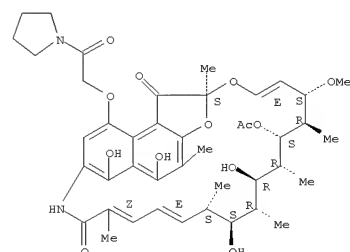
Absolute stereochemistry.
 Double bond geometry as described by E or Z.



IT 13929-40-3P, Pyrrolidine,
 1-[[[(1,2-dihydro-5,6,17,19,21-pentahydroxy-23-methoxy-2,4,12,16
 18,20,22-heptamethyl-1,11-dioxo-2,7-
 (epoxypentadeca[1,11,13]trienimino)naphtho[2,1-b]furan-9-yl)oxy]acetyl]-,
 21-acetate 14150-54-0P, Morpholine,
 4-[[[(1,2-dihydro-5,6,17,19,21-pentahydroxy-23-methoxy-2,4,12,16,18,20,22-
 heptamethyl-1,11-dioxo-2,7-(epoxypentadeca[1,11,13]trienimino)naphtho[2,1-
 b]furan-9-yl)oxy]acetyl]-, 21-acetate 26242-20-6P,
 4-Pipecoline, 1-[[[(1,2-dihydro-5,6,17,19,21-pentahydroxy-23-methoxy-
 2,4,12,16,18,20,22-heptamethyl-1,11-dioxo-2,7-
 (epoxypentadeca[1,11,13]trienimino)naphtho[2,1-b]furan-9-yl)oxy]acetyl]-,
 21-acetate 38123-17-0P, Pyrrolidine,
 1-[[[(1,2-dihydro-5,6,17,19,21-pentahydroxy-23-methoxy-2,4,12,16,18,20,22-
 heptamethyl-1,11-dioxo-2,7-(epoxypentadeca[1,11,13]trienimino)naphtho[2,1-
 b]furan-9-yl)oxy]acetyl]-, 21-acetate 55372-15-1P,
 Morpholine, 4-[[[(1,2-dihydro-5,6,17,19,21-pentahydroxy-23-methoxy-
 2,4,12,16,18,20,22-heptamethyl-1,11-dioxo-2,7-
 (epoxypentadeca[1,11,13]trienimino)naphtho[2,1-b]furan-9-yl)oxy]acetyl]-,
 3,5-dimethyl-, 21-acetate 106505-36-6P,

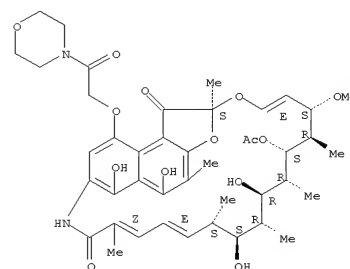
L19 ANSWER 706 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
 2,5-Pyrrolidinedimethanol, 1-[[[(1,2-dihydro-5,6,17,19,21-pentahydroxy-23-
 methoxy-2,4,12,16,18,20,22-heptamethyl-1,11-dioxo-2,7-
 (epoxypentadeca[1,11,13]trienimino)naphtho[2,1-b]furan-9-yl)oxy]acetyl]-,
 21-acetate
 RL: PREP (Preparation)
 (prepn. of)
 RN 13929-40-3 CAPLUS
 CN Rifamycin, 4-O-[2-oxo-2-(1-pyrrolidinyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.



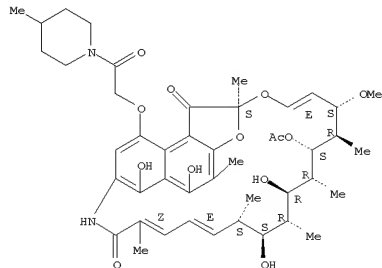
RN 14150-54-0 CAPLUS
 CN Rifamycin, 4-O-[2-(4-morpholinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.



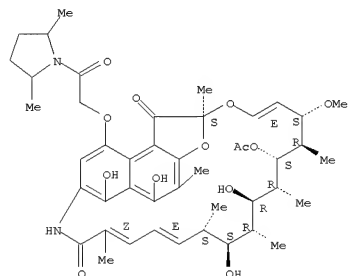
L19 ANSWER 706 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
 RN 26242-20-6 CAPLUS
 CN Rifamycin, 4-O-[2-(4-methyl-1-piperidinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.



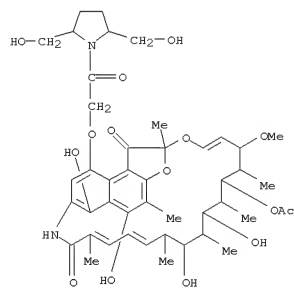
RN 38123-17-0 CAPLUS
 CN Rifamycin, 4-O-[2-(2,5-dimethyl-1-pyrrolidinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.



RN 38123-18-1 CAPLUS
 CN Rifamycin, 4-O-[2-(3-methyl-4-morpholinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

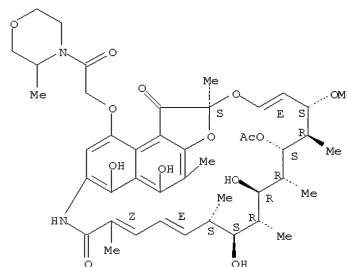
L19 ANSWER 706 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
 (2 CITINGS)

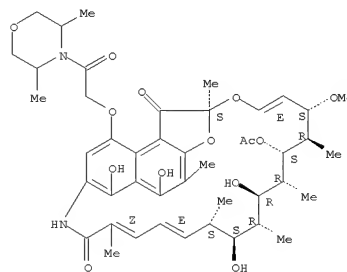
L19 ANSWER 706 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.



RN 55372-15-1 CAPLUS
 CN Rifamycin, 4-O-[2-(3,5-dimethyl-4-morpholinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.

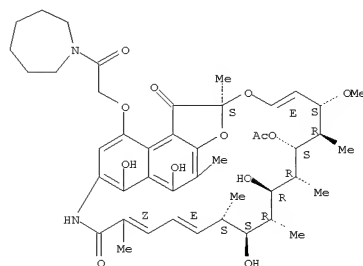


RN 106505-36-6 CAPLUS
 CN 2,5-Pyrrolidinedimethanol, 1-[[[(1,2-dihydro-5,6,17,19,21-pentahydroxy-23-methoxy-2,4,12,16,18,20,22-heptamethyl-1,11-dioxo-2,7-(epoxypentadeca[1,11,13]trienimino)naphtho[2,1-b]furan-9-yl)oxy]acetyl]-, 21-acetate (7CI) (CA INDEX NAME)

L19 ANSWER 707 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1964:461681 CAPLUS
 DOCUMENT NUMBER: 61:61681
 ORIGINAL REFERENCE NO.: 61:10686c-d
 TITLE: Some cyclic tetraamines and their metal-ion complexes.
 I. Two isomeric hexamethyltetraazacyclotetradecanes and their copper(II) and nickel(II) complexes
 CURTIS, N. F.
 VICTORIA UNIV., WELLINGTON, N. Z.
 JOURNAL OF THE CHEMICAL SOCIETY (1964), (Aug.), 2644-50
 CODEN: JCSOA9; ISSN: 0368-1769
 JOURNAL
 LANGUAGE: Unavailable
 AB A cyclic Schiff base-amine complex of Ni(II), formed by condensation of Ni(II)-ethylenediamine complexes with Me₂CO, can be reduced to form 2 isomeric cyclic tetraamine-Ni(II) complexes. These are decomposed by CN⁻ ions, releasing the isomeric cyclic tetraamines, which reform the original Ni(II) complexes on reaction with Ni(II) salts, and form isomeric complexes with other metal ions. The amines, hydrochloride salts, and Cu(II) and Ni(II) complexes are described.
 IT 13929-37-8P, Hexamethylenimine, 1-[[[(1,2-dihydro-5,6,17,19,21-pentahydroxy-23-methoxy-2,4,12,16,18,20,22-heptamethyl-1,11-dioxo-2,7-(epoxypentadeca[1,11,13]trienimino)naphtho[2,1-b]furan-9-yl)oxy]acetyl]-, 21-acetate
 RL: PREP (Preparation)
 (preparation of)
 RN 13929-37-8 CAPLUS
 CN Rifamycin, 4-O-[2-(hexahydro-1H-azepin-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.

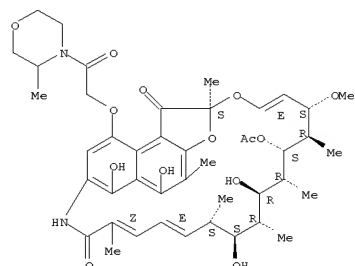


OS.CITING REF COUNT: 41 THERE ARE 41 CAPLUS RECORDS THAT CITE THIS

L19 ANSWER 708 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1964:461680 CAPLUS
DOCUMENT NUMBER: 61:61680
ORIGINAL REFERENCE NO.: 61:10685d-h,10686a-c
TITLE: Application of Mannich reaction for synthesis of heterocyclic systems. V.
2-Aryl-6-nitro-2,3,4,5-tetrahydro-1,2,4-triazine derivatives
AUTHOR(S): Hahn, Witold E.; Zawadzka, Halina
CORPORATE SOURCE: Univ. Lodz, Pol.
SOURCE: Roczniki Chemii (1964), 38(4), 557-69
CODEN: ROCHAC; ISSN: 0035-7677
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB cf. CA 59, 8747c. Condensation of ArHNN:CHNO₂ (I) with CH₂O, primary, and secondary amines was studied. Thus, a solution of 0.1 mole appropriate primary aromatic amine in 100 ml. 13% HCl was diazotized at 0° and the whole together with a solution of 8.2 g. AcONa in 100 ml. H₂O, added dropwise to a mixture prepared at -5° from 4 g. NaOH in saturated aqueous solution, 50 ml. EtOH, 6.1 g. MeNO₂, and 500 ml. H₂O. The precipitate was filtered off, washed with H₂O, dissolved at 0° in 200 ml. N NaOH, and titrated with N HCl to pH 7 to precipitate ArHNN:C(N:Na)NO₂ (II). II was filtered off and the filtrate acidified with N HCl to give I. The following I were prepared (Ar, m.p., % yield, and λ in mμ given): Ph, 91-2°, 45, 240; p-ClC₆H₄, 122-2.5°, 45, 242; p-NO₂C₆H₄, 158-9°, 50, 225; p-ETOC₆H₄, 119-19.5° (decomposition), 48, 242. A suspension of 0.01 mole I in 10 ml. EtOH was treated successively with 0.011 mole primary amine and 1.78 g. 37% CH₂O, the mixture heated 15-20 min. on a water bath, and left for a few days at room temperature to give III. The following III were prepared (Ar, R, m.p., and % yield given): Ph, Me, 85.5-86°, 90; Ph, Et, 74-5°, 60; Ph, CH₂:CHCH₂, 89-90°, 60; Ph, Me₂CH, 122.5-24°, 55; Ph, Ph, 109-10.5°, 69; Ph, cyclohexyl, 99.5-101°, 75; Ph, PhCH₂, 78-9.5°, 79; p-ClC₆H₄, Me, 104.5-103°, 42; p-ClC₆H₄, HOC₂H₄, 115-16°, 42; p-ClC₆H₄, CH₂:CHCH₂, 62-3.5°, 54; p-ClC₆H₄, Me₂CH, 92-3.5°, 69; p-ClC₆H₄, Bu, 80.5-82°, 62; p-ClC₆H₄, Ph, 129.5 31°, 61; p-ClC₆H₄, cyclohexyl, 116-17.5°, 60; p-ClC₆H₄, PhCH₂, 123-4.5°, 57; p-O₂NC₆H₄, Me, 180-80.5° (decomposition), 42; p-O₂NC₆H₄, Et, 141-2°, 55; p-O₂NC₆H₄, CH₂:CHCH₂, 102.5-3.5°, 52; p-O₂NC₆H₄, Ph, 194-4.5° (decomposition), 50; p-O₂NC₆H₄, cyclohexyl, 133-4°, 50; p-O₂NC₆H₄, PhCH₂, 158-9°, 55; p-ETOC₆H₄, Me, 107.5-100.8°, 50; p-ETOC₆H₄, Et, 73.4-74°, 58; p-ETOC₆H₄, CH₂:CHCH₂, 72-3°, 57; p-ETOC₆H₄, Ph, 146-6.5°, 60; p-ETOC₆H₄, cyclohexyl, 87-7.5°, 60; p-ETOC₆H₄, PhCH₂, 117.5-19°, 57. III(Ar = Ph, R = HO₂CCH₂), m. 191-2°, was prepared in 85% yield from a solution of 2.47 g. PhHNN:CHNO₂ in 50 ml. dioxane treated successively with 1.2 g. NH₂CH₂CO₂H in saturated aqueous solution, and 2.92 g. 37% CH₂O, the mixture heated to solution, and left 3 days at room temperature. A suspension of 0.01 mole I in 10 ml. EtOH treated successively with 0.99 g. morpholine and 0.89 g. 37% CH₂O and heated 20 min. on a water bath yielded IV. The following IV were prepared (Ar, m.p.,

L19 ANSWER 708 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
and % yield given): Ph, 101-2°, 68; p-ClC₆H₄, 135.5-36°, 67; p-O₂NC₆H₄, 154.5-5.5° (decompn.), 65; p-ETOC₆H₄, 154-5°, 62. A soln. of 0.2 mole I (Ar = Ph) and 0.1 mole CH₂O in the presence of piperazine in EtOH refluxed 15 min. gave (PhHNN:CHNO₂)₂CH₂ (V), m. 170-1°. Similarly prepd. was (p-ClC₆H₄HNN:CHNO₂)₂CH₂ (VI), m. 243-4°, in the presence of either K₂CO₃, piperidine, Me₂NH, or Et₂NH. V and VI were identical with the products obtained by the condensation of (O₂NCH₂)₂CH₂ either with PhN₂Cl or p-ClC₆H₄N₂Cl, carried out as for I. V (3.42 g.), 25 ml. EtOH, 0.81 g. 37% CH₂O, and 0.01 g. K₂CO₃ heated 1 hr. on a water bath gave VII, m. 149-50° (AcOH, alc.). VII was identical with a product prepd. from 0.1 mole I and 0.1 mole CH₂O by refluxing 15 min. in 15 ml. EtOH with K₂CO₃, HOCH₂CH₂NH₂, PhNH₂, CH₂:CHCH₂NH₂, or cyclohexylamine. The following reactions were carried out to prove the structure III. PhNH₂ (0.1 mole) in 100 ml. 13% HCl was diazotized at 0° and the whole treated as in prepn. of II with the use of 7.8 g. HOCH₂CH₂NO₂ instead of MeNO₂. The mixt. stirred 2 hrs. at -5° and filtered gave 14.4 g. PhHNN:C(NO₂)CH₂OH (VIII), m. 108-9° (ligroine); similarly p-ClC₆H₄NH₂ gave 13 g. p-ClC₆H₄HNN:C(NO₂)CH₂OH (IX), m. 113-13.5° (ligroine). A suspension of 5.85 g. VIII and 1.77 g. iso-PrNH₂ in 15 ml. EtOH left for 5 days at room temp. gave 2.2 g. III (R = iso-Pr, Ar = Ph), m. 122.5-24°. However, a suspension of 4.58 g. IX in 15 ml. EtOH treated with 1.18 g. iso-PrNH₂ or 1.46 g. BuNH₂ and left for 2 days at room temp. gave 2.5 g. VI exclusively.
IT 38123-18-1
(Derived from data in the 7th Collective Formula Index (1962-1966))
RN 38123-18-1 CAPLUS
CN Rifamycin, 4-O-[2-(3-methyl-4-morpholinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

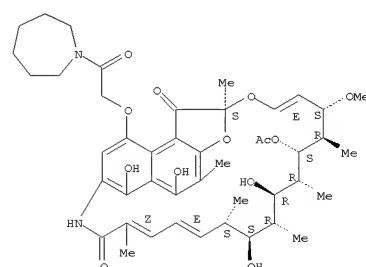
Absolute stereochemistry.
Double bond geometry as described by E or Z.



IT 13929-37-8P, Hexamethylenimine,
1-[[[1,2-dihydro-5,6,17,19,21-pentahydroxy-23-methoxy-2,4,12,16,18,20,22-heptamethyl-1,11-dioxo-2,7-(epoxypentadeca[1,11,13]trienimino)naphtho[2,1-

L19 ANSWER 708 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
b]furan-9-yl)oxy]acetyl]-, 21-acetate
RL: PREP (Preparation)
(prep. of)
RN 13929-37-8 CAPLUS
CN Rifamycin, 4-O-[2-(hexahydro-1H-azepin-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.

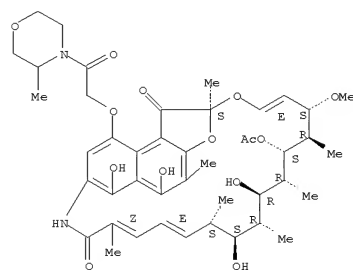


OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

L19 ANSWER 709 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1964:461679 CAPLUS
 DOCUMENT NUMBER: 61:61679
 ORIGINAL REFERENCE NO.: 61:10685a-d
 TITLE: The diazabenzobicyclo[3.3.1]nonane system. II. 3,4-Dihydro-2H,6H-1,5-methanobenzo[b][1,4]diazepines
 AUTHOR(S): Shiotani, Shunsaku; Mitsuhashi, Kemotsu
 CORPORATE SOURCE: Univ. Toyama, Japan
 SOURCE: Yakugaku Zasshi (1964), 84(7), 656-63
 CODEN: YKZAJ; ISSN: 0031-6903
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 GI For diagram(s), see printed CA Issue.
 AB cf. CA 61, 9479g. A solution of 9.4 g. p-tosyl chloride (TsCl) in C5H5N is dropped into a solution of 3 g. 2-aminobenzylamine in 10 ml. C5H5N and kept overnight to give 7.5 g. 2-TsNHC6H4CH2NHTs (I), m. 131-4° (AcOH). I (35 g.) is refluxed in a solution of 4 g. Na in 500 ml. BuOH for 1 hr. and refluxed 9 hrs. with 17 g. 1,3-dibromopropane to give 17.5 g. 1,5-ditosyl-1,2,3,4,5,6-hexahydrobenzo[b][1,5]diazocine (II), m. 176-7° (AcOH). A solution of 17.5 g. II in 400 ml. BuOH is refluxed with 25.5 g. Na to give 4.5 g. 1,2,3,4,5,6-hexahydro-benzo[b][1,5]diazocine (III), b0.35 114-16°, m. 57-60° (hexane); picrate m. 197-9.5° (decomposition) (EtOH). Similarly is prepared 2,3,4,5-tetrahydro-1H-benzo[e][1,4]diazepine (IV), picrate m. 182-5°. A solution of 1.8 g. III in 7.5 ml. MeOH is warmed 2 hrs. at 50-5° with 5.4 ml. 35% formalin to give 1.6 g. 3,4-dihydro-2H,6H-1,5-methanobenzo[b][1,5]diazocine (V, R = H), b0.6 107-8°; picrate m. 171-4° (decomposition) (EtOH). Similarly prepared are V(R = Ph) (b0.09 150-4°, m. 85.5-7° (Et2O)); picrate m. 181-1.5° and V (R = Me) (b0.32 100-5°; picrate m. 163-4°). Also are prepared 2,3-dihydro-5H-1,4-methanobenzo[e][1,4]diazepine (b0.36 84-93°; picrate m. 182-3.5°) and the 10-phenyl derivative (VI) (b0.33 155-60°) starting from IV instead of III. Treatment of VI with picric acid gives IV picrate instead of VI picrate.
 IT 38123-18-1
 (Derived from data in the 7th Collective Formula Index (1962-1966))
 RN 38123-18-1 CAPLUS
 CN Rifamycin, 4-O-[2-(3-methyl-4-morpholinyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.

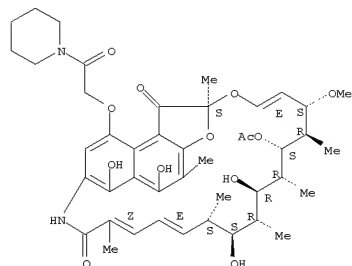
L19 ANSWER 709 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
 (2 CITINGS)

L19 ANSWER 710 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1964:424723 CAPLUS
 DOCUMENT NUMBER: 61:24723
 ORIGINAL REFERENCE NO.: 61:4165g-h,4166c
 TITLE: The formation of biphenyls from derivatives of benzene-1,4-diazooxide. Electrophilic substitution
 AUTHOR(S): Dewar, Michael J. S.; Narayanaswami, K.
 CORPORATE SOURCE: Univ. of Chicago
 SOURCE: Journal of the American Chemical Society (1964), 86(12), 2422-7
 CODEN: JACSAT; ISSN: 0002-7863
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 AB Earlier work (CA 52, 17147e; 53, 10086e) had shown that the thermal decomposition of derivs. of benzene-1,4-diazooxides in C6H6 or in derivs. of C6H6 in presence of catalytic amts. of alc. gives derivs. of 4-hydroxybiphenyl in good yield. We have reexamd. this reaction in detail and have shown that, contrary to an earlier suggestion, it does not involve a free radical mechanism. Decomposition of the diazooxide gives a carbene which attacks the aromatic substrate. The process is essentially an electrophilic substitution, the 1st step in which is the formation of a π-complex or spiran. The bearing of this on the mechanism of electrophilic aromatic substitution is discussed.
 IT 14487-04-8
 (Derived from data in the 7th Collective Formula Index (1962-1966))
 RN 14487-04-8 CAPLUS
 CN Rifamycin, 4-O-[2-oxo-2-(1-piperidinyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD
 (6 CITINGS)

L19 ANSWER 710 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

L19 ANSWER 711 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1964:424719 CAPLUS
DOCUMENT NUMBER: 61:24719
ORIGINAL REFERENCE NO.: 61:4165b, 4166a-b
TITLE: New antibiotics-rifamycin B amides
PATENT ASSIGNEE(S): Lepetit S.p.A.
SOURCE: 15 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 632770		19631021	BE	
GB 965019			GB	

PRIORITY APPLN. INFO.: GB 19620525

AB Rifamycin B (I) (probably C39H51NO14), a dibasic acid (pK1 2.8, pK2 6.7), one of the acid functions being a carboxyl group, was converted into amides by treatment with NH3 or a mono- or di-substituted amine in the presence of dicyclohexylcarbodiimide (DCC) in THF (THF). . Thus, 10 g. I was suspended in 500 mL. anhydrous THF, 2.73 g. DCC added, and then 35 mL.

THF saturated with NH3. The mixture was refluxed 20 min. and cooled to 10° to give lemon-yellow amide. Similarly prepared were amides with EtNH2, piperidine, pyrrolidine, PhNH2, and others. The amides had no sharp m.p. and decomposed >250°. They showed antibacterial activity against gram-pos. bacteria and against Mycobacterium tuberculosis.

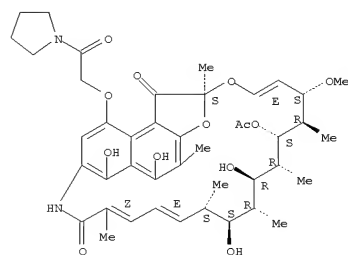
IT 13929-40-3P, Pyrrolidine, 1-[(1,2-dihydro-5,6,17,19,21-pentahydroxy-23-methoxy-2,4,12,16,18,20,22-heptamethyl-1,11-dioxo-2,7-(epoxypentadeca[1,11,13]trienimino)naphtho[2,1-b]furan-9-yl)oxy]acetyl]-, 21-acetate
RL: PREP (Preparation)
(preparation of)

RN 13929-40-3 CAPLUS
CN Rifamycin, 4-O-[2-oxo-2-(1-pyrrolidinyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.

L19 ANSWER 711 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L19 ANSWER 712 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1961:11119 CAPLUS
DOCUMENT NUMBER: 55:11119
ORIGINAL REFERENCE NO.: 55:2166g-4, 2167a
TITLE: Correlation between structure and thermal stability of

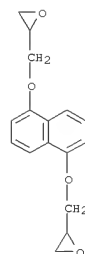
epoxy resins
AUTHOR(S): Ehlers, Gerhard F. L.
CORPORATE SOURCE: Wright Patterson Air Force Base, OH
SOURCE: Polymer (1960), 1, 304-314
CODEN: POLMAG; ISSN: 0032-3861
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Thermal stability of cured epoxy resins was investigated in terms of weight loss and Vicat heat distortion temperature. Resins used were: 1,1,3,3-tetrakis(p-glycidyloxyphenyl) ethane, 3,4-epoxy-6-methylcyclohexylmethyl 3,4-epoxy-6-methylcyclohexanecarboxylate, and the diglycidyl ethers of the following 6 phenols: Bisphenol A, 1,5- and 1,6-naphthalenediol, 3,3'- and 4,4'-dihydroxybiphenyl, and 4,4'-dihydroxydiphenyl sulfone. The Bisphenol

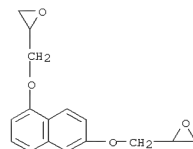
A resin had an epoxy equivalent of 470. Amines, phenols, anhydrides, and BF3-EtNH2 were employed as curing agents. In one series α -pinene oxide, dipentene oxide, and allyl glycidyl ether were used as reactive diluents. The amines, phenols, and anhydrides (in order of descending Vicat temperature measured) were: 4,4'-diaminodiphenyl sulfone, benzidine, 2,4,6-triaminotoluene, N,N-diallyl melamine, 3,3'-diaminodiphenyl sulfone, m- and p-phenylenediamine, diethylenetriamine, ethylenediamine; phloroglucinol, 1,1,2,2-tetrakis(p-hydroxyphenyl) ethane, 4,4'-dihydroxydiphenyl sulfone, 1,6-, 1,5-, and 2,7-naphthalenediol, resorcinol, hydroquinone, pyromellitic dianhydride, maleic, citraconic, hexahydrophthalic, phthalic, succinic, and chlorendic anhydrides. Anhydride-cured resins generally gave the highest Vicat temperature

IT 27610-47-5, Naphthalene, 1,5-bis(2,3-epoxypropoxy)-
27610-48-6, Naphthalene, 1,6-bis(2,3-epoxypropoxy)-
(epoxy resins containing, thermal stability of)
RN 27610-47-5 CAPLUS
CN Oxirane, 2,2'-[1,5-naphthalenediylbis(oxymethylene)]bis- (9CI) (CA INDEX NAME)

L19 ANSWER 712 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 27610-48-6 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)



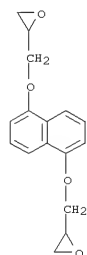
L19 ANSWER 713 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1957:45314 CAPLUS
DOCUMENT NUMBER: 51:45314
ORIGINAL REFERENCE NO.: 51:8436c-e
TITLE: Chemically modified cellulose
INVENTOR(S): Doughty, Mark; Brown, Brindley J.
PATENT ASSIGNEE(S): Fothergill and Harvey, Ltd.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 757386		19560919	GB 1953-7111	19530314

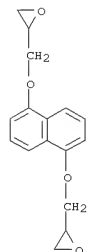
AB Cross linkages containing aromatic rings are used to modify cellulose. Cellulose is treated with a bis(glycidyl ether) of a polyhydroxyphenol, i.e. hydroquinone, resorcinol, phloroglucinol, dihydroxynaphthalene, in the presence of the hydroxide of an alkali metal and heated. For example, the mixed diastereoisomers of resorcinol bis(glycidyl ether) were prepared by the reaction of resorcinol, epichlorohydrin, and NaOH. The bis-ether was purified by distillation and the middle fraction b2.5 182-9° was used for treatment of cellulose. Regenerated cellulose fibers (after treatment with 18% NaOH) were immersed in a 30% xylene solution of the resorcinol bis(glycidyl ether) and heated at 120° for 13 min. After washing, the resulting cellulose fibers were found to be insol. in cuprammonium hydroxide.

IT 27610-47-5P, Naphthalene, 1,5-bis(2,3-epoxypropoxy)-
RL: PREP (Preparation)

RN 27610-47-5 CAPLUS
CN Oxirane, 2,2'-[1,5-naphthalenediylbis(oxymethylene)]bis- (9CI) (CA INDEX NAME)



L19 ANSWER 714 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)

L19 ANSWER 714 OF 714 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1954:13253 CAPLUS
DOCUMENT NUMBER: 48:13253
ORIGINAL REFERENCE NO.: 48:2406h-1,2407a-b
TITLE: Epoxy resins from bis-, tris-, and tetrakis-glycidyl ethers
AUTHOR(S): Dearborn, Elizabeth C.; Fuoss, Raymond M.; MacKenzie, Alfred K.; Shepherd, Ridgley G., Jr.
CORPORATE SOURCE: United States Testing Co., Boston, MA
SOURCE: Journal of Industrial and Engineering Chemistry (Washington, D. C.) (1953), 45, 2715-21
CODEN: JIECAD; ISSN: 0095-9014
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB The reaction between polyglycidyl ethers and carboxylic acid anhydrides was studied by using the thermal yield point as the significant experimentally observed variable. The yield point increases with increasing anhydride content of the molding compound to a maximum which corresponds to a ratio of one mole of anhydride to one mole of epoxy oxygen. Maximum impact strength and min. heat loss likewise appear at this stoichiometrically critical composition. Amines were found to accelerate the reaction markedly. The following compns. are described, together with the synthesis of new intermediates: phthalic anhydride with the glycidyl ethers of 1,3,5-trihydroxybenzene, 2,2,5,5-tetrakis(4-hydroxyphenyl)hexane, 2,2,4,4-tetrakis(4-hydroxyphenyl)pentane, 2,2,3,3-tetrakis(4-hydroxyphenyl)butane, 2,2-bis(4-hydroxyphenyl)propane, tris(4-hydroxyphenyl)methane, 1,5-dihydroxynaphthalene, 1,3-dihydroxybenzene, and 1,4-dihydroxybenzene; Epon 834 (Shell Chemical Corp.) with phthalic, maleic, 4-cyclohexene-1,2-dicarboxylic, adipic poly-, dichlorophthalic, and 1,5-dimethyl-2,3,4,6,7,8-hexahydronaphthalene-3,4,7,8-tetracarboxylic anhydrides. Increasing the functionality of the glycidyl ether and (or) that of the anhydride increases the thermal yield point.

IT 27610-47-5P, Naphthalene, 1,5-bis(2,3-epoxypropoxy)-
RL: PREP (Preparation)
(preparation and reaction with anhydrides)

RN 27610-47-5 CAPLUS
CN Oxirane, 2,2'-[1,5-naphthalenediylbis(oxymethylene)]bis- (9CI) (CA INDEX NAME)

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
87.65	390.47

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-12.75	-12.75

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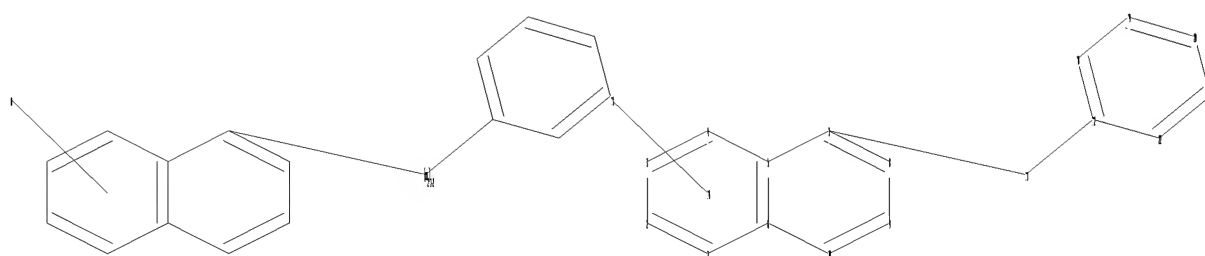
STRUCTURE FILE UPDATES: 10 FEB 2010 HIGHEST RN 1205743-44-7
DICTIONARY FILE UPDATES: 10 FEB 2010 HIGHEST RN 1205743-44-7

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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of



chain nodes :

11 13

ring nodes :

1 2 3 4 5 6 7 8 9 10 12 18 19 20 21 22

chain bonds :

7-11 11-12

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20
20-21 21-22

exact bonds :

7-11 11-12

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20

L5 3300 S L3 FULL
L6 SCREEN 1841
L7 STRUCTURE UPLOADED
L8 QUE L7 AND L6
L9 792 S L8 FULL SUB=L5
L10 2508 S L5 NOT L9
L11 SCREEN 1841
L12 STRUCTURE UPLOADED
L13 QUE L12 AND L11
L14 2018 S L13 FULL SUB=L5
L15 1282 S L5 NOT L14
L16 1078 S L15 AND L10
L17 983 S L16 AND CAPLUS/LC
L18 95 S L16 NOT L17

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L19 714 S L17

FILE 'REGISTRY' ENTERED AT 11:03:41 ON 12 FEB 2010
L20 SCREEN 1841
L21 STRUCTURE UPLOADED
L22 QUE L21 AND L20

=> s l22 subset=l17 full
FULL SUBSET SEARCH INITIATED 11:04:24 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED - 411 TO ITERATE

100.0% PROCESSED 411 ITERATIONS
SEARCH TIME: 00.00.01

0 ANSWERS

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chain nodes :
11 13
ring nodes :
1 2 3 4 5 6 7 8 9 10 12 18 19 20 21 22
chain bonds :
7-11 11-12
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20
20-21 21-22
exact bonds :
7-11 11-12
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20
20-21 21-22
isolated ring systems :
containing 1 :

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Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 18:CLASS 19:CLASS 20:CLASS
21:CLASS 22:CLASS

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FILE LAST UPDATED: 11 Feb 2010 (20100211/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

CAprus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 127

L28 544 L27

=> d ibib abs hitstr 500-544

L28 ANSWER 500 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:562494 CAPLUS
DOCUMENT NUMBER: 119:162494
ORIGINAL REFERENCE NO.: 119:29113a, 29116a
TITLE: Powdered epoxy resin coatings for cast iron pipes
INVENTOR(S): Kitagawa, Masayoshi; Oi, Shoichi; Saito, Masahiko;
Genda, Tsukasa
PATENT ASSIGNEE(S): Kurimoto Iron Works, Ltd., Japan; Meishin K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04370162	A	19921222	JP 1991-171705	19910617

PRIORITY APPLN. INFO.: JP 1991-171705 19910617

AB The title coatings, having good toughness and no pinholes, are prepared from compns. containing epoxy resins having m.p. 50-200°, softening temperature ≥40°, and viscosity ≤50 P at 100°, ≤30 P at 150° and ≤10 P at 200°, other epoxy resins, hardeners, and optionally colorants and/or fillers. A composition containing

Epikote YX 4000, Epiclon 4050, adipic dihydrazide, and Epiclon B 6051 M (hardener) gave a coating which was resistant to corrosion during 3000 h in contact with 3% aqueous NaCl solution at 35°.

IT 150179-32-1

RL: USES (Uses)
(powder coatings, anticorrosive, for cast iron pipe)

RN 150179-32-1 CAPLUS

CN Hexanedioic acid, dihydrazide, polymer with (chloromethyl)oxirane, Epiclon

B 6051M, 4,4'-(1-methylethylidene)bis[phenol] and 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 149718-71-8

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 27610-48-6

CMF C16 H16 O4

L28 ANSWER 501 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:562053 CAPLUS
DOCUMENT NUMBER: 119:162053
ORIGINAL REFERENCE NO.: 119:29041a, 29044a
TITLE: Heat-resistant epoxy resin adhesive compositions
INVENTOR(S): Takeda, Toshimitsu; Yamazaki, Hajime
PATENT ASSIGNEE(S): Yokohama Rubber Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05078640	A	19930330	JP 1991-245657	19910925

PRIORITY APPLN. INFO.: JP 1991-245657 19910925

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title adhesives, useful for printed circuit boards, are obtained by blending aromatic diamines with resins composed of 10-95% naphthalene ring-containing bifunctional epoxy resins I (n = 0-3) and 5-90% novolak-type naphthalene ring-containing epoxy resins II (m = 0-3). Thus, a Cu foil was coated with a composition containing I (HP 4032) 95, II (EXA 4300) 5, C 600 (3,3'-diaminodiphenyl sulfone) 40, and MEK 40 parts, dried, laminated with an Al plate pretreated with a H2SO4-chromic acid mixture, and pressed at 150-200° for 2 h to give a Cu-clad laminate showing 90° peel strength 2.6 kg/cm at room temperature and 1.9 at 150° and good soldering resistance.

IT 150275-07-3P

RL: PREP (Preparation)
(preparation of, adhesives, heat-resistant, for printed circuit boards)

RN 150275-07-3 CAPLUS

CN Benzenamine, 3,3'-sulfonylbis-, polymer with EXA 4300 and 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 150138-96-8

CMF Unspecified

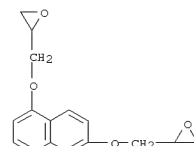
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CRN 27610-48-6

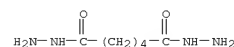
L28 ANSWER 500 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



CM 3

CRN 1071-93-8

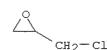
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CRN 106-89-8

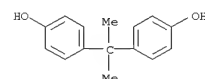
CMF C3 H5 Cl O



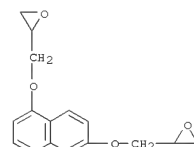
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CRN 80-05-7

CMF C15 H16 O2



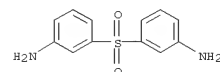
L28 ANSWER 501 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CMF C16 H16 O4



CM 3

CRN 599-61-1

CMF C12 H12 N2 O2 S



L28 ANSWER 502 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:540766 CAPLUS
DOCUMENT NUMBER: 119:140766
ORIGINAL REFERENCE NO.: 119:25257a,25260a
TITLE: Heat- and moisture-resistant modified epoxy resins for
potting compositions
INVENTOR(S): Ogura, Ichiro; Sakata, Hiroshi; Ebara, Toshiharu; Kitamura, Taku
PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05009261	A	19930119	JP 1991-159240	19910629

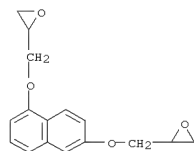
PRIORITY APPLN. INFO.: JP 1991-159240 19910629

AB The title resins contain the reaction products of bis(hydroxynaphthyl)alkanes and epichlorohydrin (I) with 70-30% of which being in the forms of bis(glycidoxynaphthyl)alkanes. Thus, the reaction product of I and bis(2-hydroxy-1-naphthyl)methane composition containing

51% bis(2-glycidoxy-1-naphthyl)methane was prepared, mixed (100 parts) with
25 parts phenolic novolak resin and 0.1 part Ph3P, kneaded at 100° for 8 min, ground, pelletized, and transfer molded at 175° and 80 kg/cm2 for 100 s and cured 8 h at 175° to give specimens with good heat and moisture resistance.

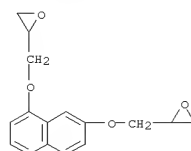
IT 27610-48-6 149837-53-6
RL: USES (Uses)
(epoxy resin containing, for potting compns. with good heat and moisture resistance)

RN 27610-48-6 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)



RN 149837-53-6 CAPLUS
CN Oxirane, 2,2'-[1,7-naphthalenediylbis(oxymethylene)]bis- (9CI) (CA INDEX NAME)

L28 ANSWER 502 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L28 ANSWER 503 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:540734 CAPLUS
DOCUMENT NUMBER: 119:140734
ORIGINAL REFERENCE NO.: 119:25253a,25256a
TITLE: Polymaleimide-containing epoxy resin compositions for potting electronic devices with good soldering heat and moisture resistance
INVENTOR(S): Kitahara, Mikio; Machida, Koichi; Kubo, Takayuki; Torikai, Motoyuki; Asahina, Kotaro; Tanaka, Junsuke
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04328118	A	19921117	JP 1991-98478	19910430
JP 2912468	B2	19990628		

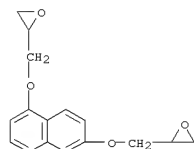
PRIORITY APPLN. INFO.: JP 1991-98478 19910430

AB The title compns. comprise 100 parts polymaleimide compds., 10-500 parts mixture of bis(diglycidoxynaphthyl)methane [I; preferably bis(1,6-dihydroxynaphthyl)methane derivative; or its mixture with other epoxy resins], polyphenol crosslinkers, and inorg. fillers 100-900 phr based on the total organic A heat- and moisture-resistant potting composition comprised a

I 6, bis(4-maleimidophenyl)methane 15, PN-80 novolak phenolic resin 4, silica fillers 75 parts and ordinary auxiliaries.

IT 148851-40-5
RL: USES (Uses)
(potting compns., containing polymaleimide crosslinkers, with good heat and moisture resistance)

RN 148851-40-5 CAPLUS
CN Oxirane, 2,2',2'',2'''-[methylenebis[7,1,6-naphthalenetriylbis(oxymethylene)]]tetrakis- (9CI) (CA INDEX NAME)



1/2 [D1-CH2-D1]

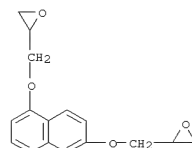
L28 ANSWER 503 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

L28 ANSWER 504 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:519132 CAPLUS
DOCUMENT NUMBER: 119:119132
ORIGINAL REFERENCE NO.: 119:21425a,21428a
TITLE: Heat-resistant epoxy resin adhesive compositions with
good adhesion strength
INVENTOR(S): Tomita, Atsushi
PATENT ASSIGNEE(S): Aika Kogyo Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05009451	A	19930119	JP 1991-189318	19910702
PRIORITY APPLN. INFO.:			JP 1991-189318	19910702

AB Title compns. are composed of A agents containing naphthalene-type epoxy resins having ≥ 2 epoxy groups (obtained by reaction of epichlorohydrin and 1,6-dihydroxynaphthalene) as essential components, and B agents containing polyaminoamides (obtained by reaction of polyamines and dimer acids or dibasic acids) as essential components. Thus, A agent [from Epiclon HP 4032 (naphthalene-type epoxy resin) and CaCO_3] and B agent (from Versamid 115 and CaCO_3) were mixed to give an adhesive composition showing good heat-resistant adhesion strength at low temperature under short curing time.
IT 131406-13-8
RL: USES (Uses)
(adhesive compns. containing polyaminoamides and, with good heat resistance and adhesion strength)
RN 131406-13-8 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, homopolymer (CA
INDEX NAME)
CM 1
CRN 27610-48-6
CMP C16 H16 O4

L28 ANSWER 504 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

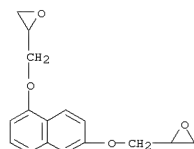


L28 ANSWER 505 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:519004 CAPLUS
DOCUMENT NUMBER: 119:119004
ORIGINAL REFERENCE NO.: 119:21409a,21412a
TITLE: Polymaleimide-containing epoxy resin compositions for
potting electronic devices with good soldering heat
and moisture resistance
INVENTOR(S): Kitahara, Mikio; Machida, Koichi; Kubo, Takayuki;
Torikai, Motoyuki; Asahina, Kotaro; Tanaka, Junsuke
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04328119	A	19921117	JP 1991-98497	19910430
JP 2912469	B2	19990628		
PRIORITY APPLN. INFO.:			JP 1991-98497	19910430

AB The title compns. comprise 100 parts polymaleimide compds., 10-500 parts mixture of naphthalenediol (I)-based epoxy resins and polyphenol crosslinkers, and inorg. fillers 100-900 phr based on the total organic
A heat- and moisture-resistant potting composition comprised a glycidyl ether of I 5.8, bis(4-maleimidophenyl)methane 15, PN-80 novolak phenolic resin 4.2, silica fillers 75 parts and ordinary auxiliaries.
IT 131406-13-8, Epiclon HP 4032H
RL: USES (Uses)
(potting compns., containing polymaleimide crosslinkers, with good heat and moisture resistance)
RN 131406-13-8 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, homopolymer (CA
INDEX NAME)
CM 1
CRN 27610-48-6
CMP C16 H16 O4

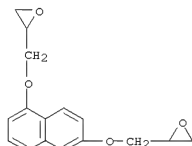
L28 ANSWER 505 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



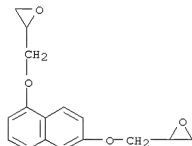
L28 ANSWER 506 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:519003 CAPLUS
DOCUMENT NUMBER: 119:119003
ORIGINAL REFERENCE NO.: 119:21409a,21412a
TITLE: Methylenebisphenols as curing agents for epoxy resin-based potting compositions with good soldering heat resistance
INVENTOR(S): Honda, Shiro; Shintani, Shuichi; Sato, Tadahide
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04325516	A	19921113	JP 1991-97519	19910426
PRIORITY APPLN. INFO.:			JP 1991-97519	19910426

OTHER SOURCE(S): MARPAT 119:119003
AB Bisphenol F (optionally lower-alkyl-substituted) is used in an epoxy resin
potting composition containing inorg. fillers which contain 75-90% mixture of 97-60%
crushed fused silica having particle diameter (S) ≤ 10 μ m, and 3-40% spherical fused silica having S ≤ 4 μ m. A title composition comprised o-cresol novolak epoxy resin (epoxy equiv 200) 11.5, bisphenol F 6.2, milled fused silica (S 6.1 μ m) 74.1, fused silica (S 2.0 μ m) 3.9 parts, and ordinary auxiliaries.
IT 27610-48-6
RL: USES (Uses)
(potting compns., containing silica fillers and bisphenol F crosslinkers, heat-resistant)
RN 27610-48-6 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis- (CA INDEX NAME)



L28 ANSWER 507 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



1/2 [D1-CH₂-D1]

CM 2
CRN 93195-67-6
CMF Unspecified
CCI FMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3
CRN 108-95-2
CMF C6 H6 O



CM 4
CRN 50-00-0
CMF C H2 O

H₂C=O

RN 148967-48-0 CAPLUS
CN Formaldehyde, polymer with 1,4-bis(methoxymethyl)benzene, BREN-S, 2,2',2'',2'''-[methylenebis(7,1,6-naphthalenetriylbis(oxyethylene))]tetrakis[oxirane] and phenol (9CI)
(CA INDEX NAME)
CM 1

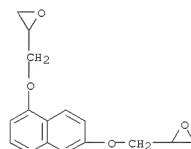
L28 ANSWER 507 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:518637 CAPLUS
DOCUMENT NUMBER: 119:118637
ORIGINAL REFERENCE NO.: 119:21357a,21360a
TITLE: Heat-resistant epoxy resin compositions
INVENTOR(S): Kitahara, Mikio; Machida, Koichi; Kubo, Takayuki; Torikai, Motoyuki; Asahina, Kotaro; Tanaka, Junsuke
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04337316	A	19921125	JP 1991-110032	19910515
PRIORITY APPLN. INFO.:			JP 1991-110032	19910515

OTHER SOURCE(S): MARPAT 119:118637
AB The title compns., useful for insulating, laminating, potting, etc., comprise (a) bis(diglycidoxynaphthyl)methane prepared by reacting dihydroxynaphthalene with formaldehyde then with epichlorohydrin, (b) phenolic resins containing ≥ 2 OH/mol., and (c) inorg. fillers. Thus, test pieces prepared from a reaction product (I) of bis(1,6-dihydroxynaphthyl)methane and epichlorohydrin 11.3, BREN-S (brominated phenol novolak epoxy resin) 0.8, PN-80 7.9, silica 80, and other additives 2.55 parts showed flexural strength 4.9 kg/mm² and crack resistance (number of defects) 2/20, vs. 1.5, and 18/20, resp., for EOEN-1020
Instead of I.
IT 148851-41-6 148967-48-0 148967-49-1
148967-50-4 148967-51-5
RL: USES (Uses)
(potting compns., heat-resistant)
RN 148851-41-6 CAPLUS
CN Formaldehyde, polymer with BREN-S, 2,2',2'',2'''-[methylenebis(7,1,6-naphthalenetriylbis(oxyethylene))]tetrakis[oxirane] and phenol (9CI)
(CA INDEX NAME)

CM 1
CRN 148851-40-5
CMF C33 H32 O8
CCI IDS

L28 ANSWER 507 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CRN 148851-40-5
CMF C33 H32 O8
CCI IDS

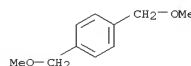


1/2 [D1-CH₂-D1]

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CRN 93195-67-6
CMF Unspecified
CCI FMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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CRN 6770-38-3
CMF C10 H14 O2



CM 4
CRN 108-95-2
CMF C6 H6 O



L28 ANSWER 507 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

CM 5

CRN 50-00-0

CMF C H2 O



RN 148967-49-1 CAPLUS

CN Formaldehyde, polymer with BREN-S, EOCN 1020, 2,2',2'',2'''-[methylenebis[7,1,6-naphthalenetriylbis(oxymethylene)]]tetrakis[oxirane] and phenol (9CI)

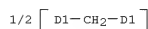
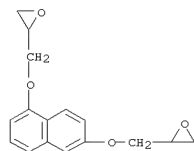
(CA INDEX NAME)

CM 1

CRN 148851-40-5

CMF C33 H32 O8

CCI IDS



CM 2

CRN 104841-49-8

CMF Unspecified

CCI FMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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CRN 93195-67-6

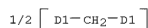
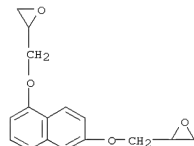
CMF Unspecified

CCI FMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

L28 ANSWER 507 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



CM 3

CRN 93195-67-6

CMF Unspecified

CCI FMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 148967-51-5 CAPLUS

CN Formaldehyde, polymer with BREN-S, EOCN 1020, methylenebis[1,6-naphthalenediol], 2,2',2'',2'''-[methylenebis[7,1,6-naphthalenetriylbis(oxymethylene)]]tetrakis[oxirane] and phenol (9CI)

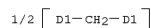
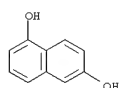
(CA INDEX NAME)

CM 1

CRN 148851-42-7

CMF C21 H16 O4

CCI IDS



CM 2

CRN 148851-40-5

L28 ANSWER 507 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

CRN 108-95-2

CMF C6 H6 O



CM 5

CRN 50-00-0

CMF C H2 O



RN 148967-50-4 CAPLUS

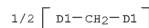
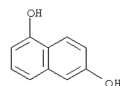
CN 1,6-Naphthalenediol, methylenebis-, polymer with BREN-S and 2,2',2'',2'''-[methylenebis[7,1,6-naphthalenetriylbis(oxymethylene)]]tetrakis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 148851-42-7

CMF C21 H16 O4

CCI IDS



CM 2

CRN 148851-40-5

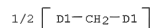
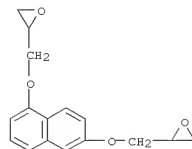
CMF C33 H32 O8

CCI IDS

L28 ANSWER 507 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

CMF C33 H32 O8

CCI IDS



CM 3

CRN 104841-49-8

CMF Unspecified

CCI FMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 93195-67-6

CMF Unspecified

CCI FMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 5

CRN 108-95-2

CMF C6 H6 O



CM 6

CRN 50-00-0

CMF C H2 O



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

L28 ANSWER 508 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:474242 CAPLUS
DOCUMENT NUMBER: 119:74242
ORIGINAL REFERENCE NO.: 119:13373a,13376a
TITLE: Epoxy resin compositions for semiconductor sealants
INVENTOR(S): Nakamura, Yoshihiko; Nakamura, Masashi; Wada, Tatsuyoshi; Otsu, Masaaki
PATENT ASSIGNEE(S): Matsushita Electric Works, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05003270	A	19930108	JP 1991-153533	19910625
JP 2953819	B2	19990927		
PRIORITY APPLN. INFO.:			JP 1991-153533	19910625

AB Heat- and moisture-resistant title compns., which do not crack during soldering, comprise epoxy resins containing $\geq 50\%$ (based on epoxy equiv) resins containing ≥ 2 glycidyl ether groups and phenolic resin hardeners containing $\geq 50\%$ (based on OH equiv) resins containing ≥ 2 phenolic OH groups. Thus, a 70:30 (epoxy equiv) mixture of YX 4000H and ESCN 195XL and

a 70:30 (OH equiv) mixture of TM-PBL (3,3',5,5'-tetramethyl-4,4'-biphenyldiol) and Tamaanol 752 were roll kneaded with 2-ethyl-4-methylimidazole 0.2, mold releasing agents 0.25, carbon black 0.25, SiO₂ 82, and silane couplers 0.4 part at 70-120° and then pulverized, transfer molded at 170-175°, and postcured at 175° to give a test piece showing moisture absorptivity 0.20%, glass temperature 160°, and flexural modulus 45 kg/mm².

IT 148947-82-4P 148947-85-7P
RL: PREP (Preparation)
(preparation of, sealants, crack- and heat- and moisture-resistant, for semiconductors)

RN 148947-82-4 CAPLUS
CN 1,6-Naphthalenediol, polymer with 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis[oxirane], Sumiepoxy ESCN 195XL and Tamaanol 752 (9CI) (CA INDEX NAME)

CM 1

CRN 117848-46-1
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

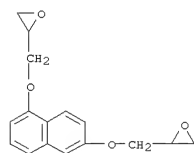
CM 2

CRN 96231-83-3
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

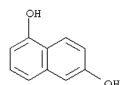
CM 3

CRN 27610-48-6
CMF C16 H16 O4



CM 4

CRN 575-44-0
CMF C10 H8 O2



RN 148947-85-7 CAPLUS
CN [1,1'-Biphenyl]-4,4'-diol, 3,3',5,5'-tetramethyl-, polymer with 2,2'-[[1-[4-[1-methyl-1-[4-(oxiranylethoxy)phenyl]ethyl]phenyl]ethylidene]bis(4,1-phenyleneoxymethylene)]bis[oxirane], 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis[oxirane] and Tamaanol 752 (9CI) (CA INDEX NAME)

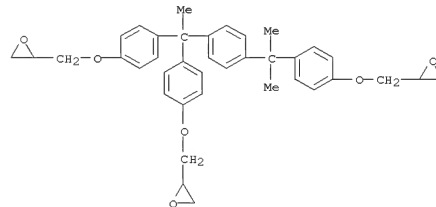
CM 1

CRN 117848-46-1
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

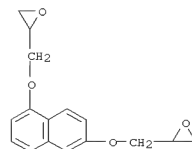
CM 2

CRN 115254-47-2
CMF C38 H40 O6



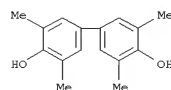
CM 3

CRN 27610-48-6
CMF C16 H16 O4



CM 4

CRN 2417-04-1
CMF C16 H18 O2

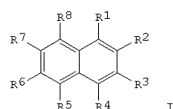


L28 ANSWER 509 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:474213 CAPLUS
DOCUMENT NUMBER: 119:74213
ORIGINAL REFERENCE NO.: 119:13369a,13372a
TITLE: Epoxy resin potting compositions for semiconductors
INVENTOR(S): Kayaba, Keiji; Sawamura, Taiji; Tanaka, Masayuki
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04325515	A	19921113	JP 1991-97430	19910426
JP 3147402	B2	20010319		

PRIORITY APPLN. INFO.: JP 1991-97430 19910426

OTHER SOURCE(S): MARPAT 119:74213
GI



AB Title comps., heat- and moisture-resistant with low stress, comprise epoxy resins I (2 of R1-8 are 2,3-epoxypropoxy and the rest H, halo, and/or C1-4 alkyl), crosslinking agents, 60-90% fillers, and styrene block copolymers modified or grafted with unsatd. carboxylic acids or their derivs. Thus, 20 model semiconductor devices were transfer-molded with a composition of 1,6-diglycidylloxynaphthalene 9.9, phenolic novolak 8.2, powdered SiO2 75.0, maleated hydrogenated butadiene-styrene triblock copolymer 1.0, Ph3P 0.2, carnauba wax 0.4, brominated phenolic novolak epoxy resin 2.5, Sb2O3 2.0, carbon black 0.3, and γ -glycidloxypropyltrimethoxysilane 0.5 part at 175° and postcured at 180°.

IT 27610-48-6
RL: USES (Uses)
(potting comps., containing fillers and modified styrene block copolymers, heat- and moisture-resistant, low-stress, for semiconductors)

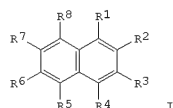
RN 27610-48-6 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)

L28 ANSWER 510 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:473917 CAPLUS
DOCUMENT NUMBER: 119:73917
ORIGINAL REFERENCE NO.: 119:13329a,13332a
TITLE: Solder heat-resistant epoxy resin compositions for sealing semiconductors
INVENTOR(S): Honda, Shiro; Sawamura, Taiji; Tanaka, Masayuki
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04370138	A	19921222	JP 1991-147081	19910619
JP 3018585	B2	20000313		

PRIORITY APPLN. INFO.: JP 1991-147081 19910619

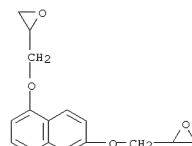
GI



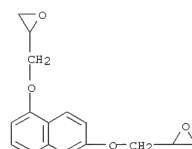
AB Comps. which avoid package crack generation in the soldering process contain (A) bifunctional epoxy resins I (2 of R1-R8 = 2,3-epoxypropoxy, the others are H, C1-4 alkyl, or halo), (B) phenolic hardeners, (C) 73-88% (based on total weight) inorg. fillers containing amorphous silica composed of 60-97% crushed silica [average particle size (d1) \leq 10 μ m] and 3-40% spherical silica (d2 \leq 4 μ m; d2 < d1), and (D) copolymers of ethylene or α -olefins with unsatd. carboxylic acid (derivs.). Thus, 1,6-bis(2,3-epoxypropoxy)naphthalene 6.6, 4,4'-bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethylbiphenyl 1.7, phenol novolak resin 5.4, amorphous silica [composed of 20% crushed silica (d1 11.9 μ m), 60% crushed silica (d1 3.5 μ m), and 20% spherical silica (d2 0.1 μ m)] 80.0, 5:95 acrylic acid-ethylene copolymer 3.0, (γ -glycidloxypropyl)trimethoxysilane 1.0, Ph3P 0.2, carnauba wax 0.3, brominated bisphenol A epoxy resin 1.5, Sb2O3 1.0, and carbon black 0.3% were dry-blended, melt-kneaded, and pulverized to give a composition showing good soldering heat resistance.

IT 27610-48-6D, polymers with cresol-formaldehyde copolymer glycidyl ether 131406-13-8 148947-67-5
RL: USES (Uses)
(sealing comps., containing phenolic hardeners and amorphous silica and ethylene- or olefin-unsatd. carboxylic acid (derivative) copolymers, for

L28 ANSWER 509 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

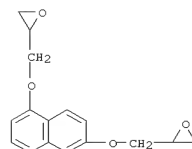


L28 ANSWER 510 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 27610-48-6 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)



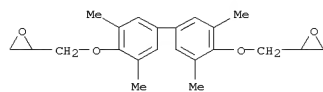
RN 131406-13-8 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, homopolymer (CA INDEX NAME)

CM 1
CRN 27610-48-6
CMF C16 H16 O4

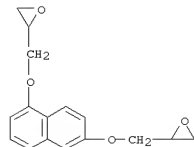


RN 148947-67-5 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, polymer with 2,2'-[(3,3',5,5'-tetramethyl[1,1'-biphenyl]-4,4'-diyl)bis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1
CRN 85954-11-6
CMF C22 H26 O4



CM 2

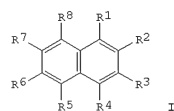
CRN 27610-48-6
CMF C16 H16 O4

L28 ANSWER 511 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1993:473916 CAPLUS
 DOCUMENT NUMBER: 119:73916
 ORIGINAL REFERENCE NO.: 119:13329a,13332a
 TITLE: Solder heat-resistant epoxy resin compositions for sealing semiconductors
 INVENTOR(S): Honda, Shiro; Sawamura, Taiji; Tanaka, Masayuki
 PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04370137	A	19921222	JP 1991-147080	19910619
JP 3018584	B2	20000313		

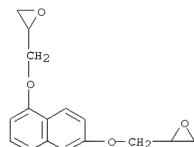
PRIORITY APPLN. INFO.: JP 1991-147080 19910619

GI



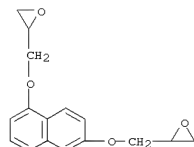
AB Comps. which avoid package crack generation in the soldering process contain (A) bifunctional epoxides I (2 of R1-R8 = 2,3-epoxypropoxy, the others are H, C1-4 alkyl, or halo), (B) phenolic hardeners, (C) 73-88% (based on total weight) inorg. fillers containing amorphous silica composed of 60-97% crushed silica [average particle size (dl) ≤10 μm] and 3-40% spherical silica (d2 ≤4 μm; d2 < dl), and (D) polystyrene-type block copolymers. Thus, 1,6-bis(2,3-epoxypropoxy)naphthalene 6.6, 4,4'-bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethylbiphenyl 1.7, phenol novolak resin 5.4, amorphous silica [composed of 20% crushed silica (dl 11.9 μm), 60% crushed silica (dl 3.5 μm), and 20% spherical silica (d2 0.1 μm)] 80.0, 63:37 isoprene-styrene hydrogenated diblock copolymer 2.0, (γ-glycidioxypropyl)trimethoxysilane 1.0, Ph3P 0.2, carnauba wax 0.3, brominated bisphenol A epoxy resin 1.5, Sb2O3 1.0, and carbon black 0.3 weight% were dry-blended, melt-kneaded, and pulverized to give a composition showing good solder-heat resistance.

IT 27610-48-6D, polymers with cresol-formaldehyde copolymer glycidyl ether 131406-13-8 148947-67-5
 RL: USES (Uses)
 (sealing comps., containing phenolic hardeners and amorphous silica and styrene block copolymers, soldering heat-resistant, for semiconductors)
 RN 27610-48-6 CAPLUS



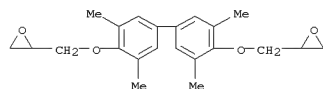
RN 131406-13-8 CAPLUS
 CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, homopolymer (CA INDEX NAME)

CM 1

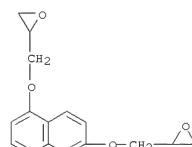
CRN 27610-48-6
CMF C16 H16 O4

RN 148947-67-5 CAPLUS
 CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, polymer with 2,2'-[(3,3',5,5'-tetramethyl[1,1'-biphenyl]-4,4'-diyl)bis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 85954-11-6
CMF C22 H26 O4

CM 2

CRN 27610-48-6
CMF C16 H16 O4

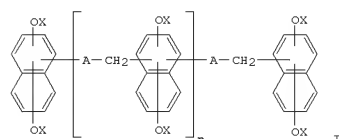
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
 (1 CITINGS)

L28 ANSWER 512 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1993:450517 CAPLUS
 DOCUMENT NUMBER: 119:50517
 ORIGINAL REFERENCE NO.: 119:9185a,9188a
 TITLE: Dihydroxynaphthalene-based epoxy resin potting compositions and laminates
 INVENTOR(S): Murata, Kazuyuki; Morita, Hiromi; Kimura, Ichiro; Ishii, Tomiyoshi; Hamauchi, Masahiro
 PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04304225	A	19921027	JP 1991-92663	19910401
JP 2856565	B2	19990210		

PRIORITY APPLN. INFO.: JP 1991-92663 19910401

GI



AB The title comps. containing I [A = -C6H2(OX)(R)-, R = C1-4 alkyl; X = H, glycidyl; n = 0-10] have low softening point and good processability and give cured products with good heat resistance and low water absorptivity. Thus, 2,6-dimethylol-4-methylphenol prepared from 4-methylphenol and paraformaldehyde was reacted with 1,6-dihydroxynaphthalene to give a compound, which (88 parts) was blended with 200 parts EOCN-1020 (cresol novolak epoxy resin) and 2.0 parts 2-methylimidazole and cured to give test pieces showing glass transition temperature 190° and water absorptivity 0.8%.

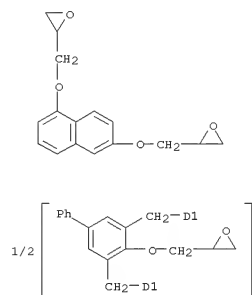
IT 148084-89-3P 148084-90-6P 148084-91-7P

148104-25-0P
 RL: PREP (Preparation)
 (preparation of, for potting comps.)

RN 148084-89-3 CAPLUS

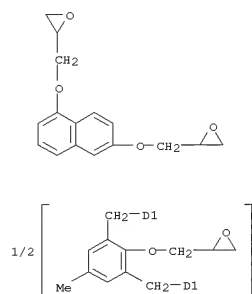
CN Oxirane, 2,2',2'',2'''-[5-(1,1-dimethylethyl)-2-(oxiranylmethoxy)-1,3-phenylene]bis[methylene-7,1,6-naphthalenetriylbis(oxymethylene)]tetrakis-(9CI) (CA INDEX NAME)

L28 ANSWER 512 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

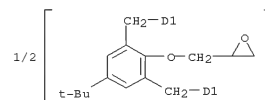
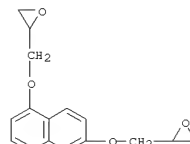


RN 148104-25-0 CAPLUS
 CN Oxirane, 2,2',2'',2'''-[5-methyl-2-(oxiranylmethoxy)-1,3-

phenylene]bis[methylene-7,1,6-naphthalenetriylbis(oxymethylene)]tetrakis-(9CI) (CA INDEX NAME)

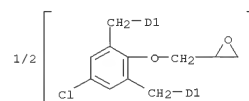
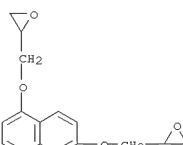


L28 ANSWER 512 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 148084-90-6 CAPLUS
 CN Oxirane, 2,2',2'',2'''-[5-chloro-2-(oxiranylmethoxy)-1,3-

phenylene]bis[methylene-7,1,6-naphthalenetriylbis(oxymethylene)]tetrakis-(9CI) (CA INDEX NAME)



RN 148084-91-7 CAPLUS

CN Oxirane, 2,2',2'',2'''-[4-(oxiranylmethoxy)[1,1'-biphenyl]-3,5-diyl]bis[methylene-7,1,6-naphthalenetriylbis(oxymethylene)]tetrakis-(9CI) (CA INDEX NAME)

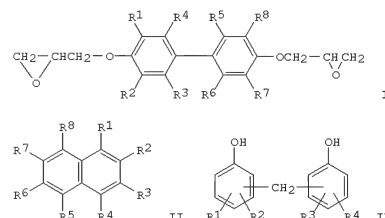
L28 ANSWER 513 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1993:429246 CAPLUS
 DOCUMENT NUMBER: 119:29246
 ORIGINAL REFERENCE NO.: 119:5413a,5416a
 TITLE: Epoxy resin compositions
 INVENTOR(S): Honda, Shiro; Shintani, Shuichi; Sato, Tadahide
 PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04306224	A	19921029	JP 1991-70859	19910403

PRIORITY APPLN. INFO.: JP 1991-70859 19910403

GI



AB The comps. contain epoxy resin I [R1-R8 = C1-4 alkyl, halo] and(or) II [R1, R4-R8 = H, C1-4 alkyl, halo; R2, R3 = glycidyl, phenol curing agents III [R1-R4 = C1-4 alkyl], and styrene block copolymer. Thus, a composition containing o-cresol novolak epoxy resin 10.8, hydrogenated butadiene-styrene triblock copolymer 2.0, bisphenol F 5.9 parts, etc. had good soldering heat resistance and moisture resistance.

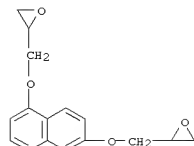
IT 27610-48-6

RL: USES (Uses)
 (styrene block copolymer comps., containing phenol curing agents,

with good soldering heat resistance)

RN 27610-48-6 CAPLUS

CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)



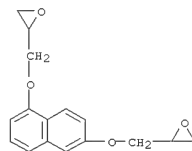
L28 ANSWER 514 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1993:410121 CAPLUS
 DOCUMENT NUMBER: 119:10121
 ORIGINAL REFERENCE NO.: 119:2029a,2032a
 TITLE: Soldering heat-resistant epoxy resin potting compositions for surface mounting of semiconductor devices
 INVENTOR(S): Honda, Shiro; Teshiba, Toshihiro; Tanaka, Masayuki
 PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04325517	A	19921113	JP 1991-97619	19910426
JP 2501143	B2	19960529		

PRIORITY APPLN. INFO.: JP 1991-97619 19910426

OTHER SOURCE(S): MARPAT 119:10121
 AB The title comps. comprise (A) main resin part containing the bifunctional biphenyl- and/or naphthalene-based epoxy resins, (B) crosslinkers which are essentially phenol-aralkyl resins, and (C) inorg. fillers containing the 97-60:3-40 mixture of crushed fumed silica (a) with particle size (s) $\leq 10 \mu\text{m}$ and spherical fused silica (b) with $s \leq 4 \mu\text{m}$ (and must be smaller than that of a. A title composition was formulated from 4,4'-bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethylbiphenyl 7.4, a hydroxyphenyl-terminated polyphenylene-poly-p-xylylene 8.3, a-type silica 76.0, b-type silica 4.0 parts, silane coupler and ordinary auxiliaries.
 IT 27610-48-6
 RL: USES (Uses)
 (potting comps. curable with polyphenols, silica fillers in, for heat soldering heat resistance)
 RN 27610-48-6 CAPLUS
 CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
 (1 CITINGS)

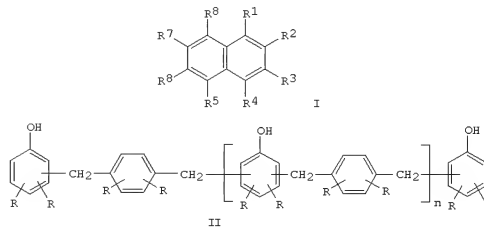
L28 ANSWER 515 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1993:409819 CAPLUS
 DOCUMENT NUMBER: 119:9819
 ORIGINAL REFERENCE NO.: 119:1989a,1992a
 TITLE: Epoxy resin compositions
 INVENTOR(S): Honda, Shiro; Teshiba, Toshihiro; Tanaka, Masayuki
 PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

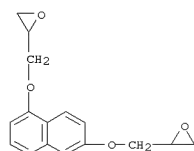
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04306223	A	19921029	JP 1991-70886	19910403
JP 3092184	B2	20000925		

PRIORITY APPLN. INFO.: JP 1991-70886 19910403

GI



AB The comps. contain epoxy resin I [R1, R4-R8 = H, C1-4 alkyl, halo; R2,R3 = epoxypropoxyl], phenol curing agents II [R = C1-4 alkyl, $n \geq 0$], and 75-90% inorg. fillers, and, optionally, contain styrene block copolymers and copolymers of ethylene or α -olefin with unsatd. carboxylic acids or their derivs. Thus, a composition containing 1,6-di(2,3-epoxypropoxy)naphthalene resin 8.4, curing agent HOC6H4CH2C6H4-p-CH2[C6H4(OH)CH2C6H4-p-CH2] n C6H4OH 10.3, γ -glycididoxypolytrimethoxysilane 1 parts, had good soldering heat-resistance and moisture-resistance.
 IT 27610-48-6
 RL: USES (Uses)
 (comps. containing inorg. fillers, phenolic curing agent, styrene block copolymer and olefin copolymers and)
 RN 27610-48-6 CAPLUS
 CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)

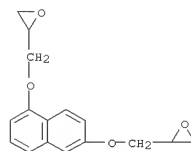


L28 ANSWER 516 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1993:256280 CAPLUS
 DOCUMENT NUMBER: 118:256280
 ORIGINAL REFERENCE NO.: 118:44537a,44540a
 TITLE: Epoxy resin compositions for potting of electronic parts
 INVENTOR(S): Sakata, Hiroshi; Ebara, Toshiharu; Ogura, Ichiro; Miyazawa, Masashi
 PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04304227	A	19921027	JP 1991-67435	19910330
JP 3267636	B2	20020318		

PRIORITY APPLN. INFO.: JP 1991-67435 19910330

AB The title comps., with good heat, moisture, and solder resistance, comprise (a) epoxy resins containing dihydroxynaphthalene diglycidyl ether (I) oligomer and (b) hardeners. Thus, a composition was prepared from 1,6-I oligomer 100, phenol novolak resin 29, and Ph3P 0.5 part.
 IT 147867-88-7 147867-89-8
 RL: USES (Uses) (potting comps., for electronic parts)
 RN 147867-88-7 CAPLUS
 CN Formaldehyde, polymer with 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis[oxirane] and phenol (9CI) (CA INDEX NAME)
 CM 1
 CRN 27610-48-6
 CMF C16 H16 O4



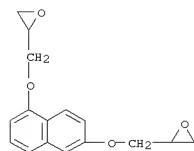
CM 2
 CRN 108-95-2
 CMF C6 H6 O



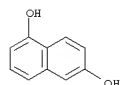
CM 3
 CRN 50-00-0
 CMF C H2 O



RN 147867-89-8 CAPLUS
 CN Formaldehyde, polymer with 1,6-naphthalenediol, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis[oxirane] and phenol (9CI) (CA INDEX NAME)
 CM 1
 CRN 27610-48-6
 CMF C16 H16 O4



CM 2
 CRN 575-44-0
 CMF C10 H8 O2



CM 3

CRN 108-95-2
 CMF C6 H6 O



CM 4
 CRN 50-00-0
 CMF C H2 O



L28 ANSWER 517 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:170624 CAPLUS
DOCUMENT NUMBER: 118:170624
ORIGINAL REFERENCE NO.: 118:29263a,29266a
TITLE: Epoxy resin potting compositions containing diglycidylloxynaphthalenes
INVENTOR(S): Kayaba, Keiji; Sawamura, Taiji; Tanaka, Masayuki
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04264155	A	19920918	JP 1991-26018	19910220
PRIORITY APPLN. INFO.:			JP 1991-26018	19910220

AB The title compns., showing good heat, solder, and fire resistance after curing, contain diglycidylloxynaphthalenes (optionally containing halo and/or Cl-4 alkyl groups), curing agents, fillers, hydrotalcites, Br compds. and Sb compds. A mixture of 1,6-diglycidylloxynaphthalene 4.9, o-cresol novolak epoxy resin 4.9, phenol novolak resin 6.85, PPh3 0.2, stearic acid 0.4, brominated bisphenol A epoxy resin 1.8, Sb2O3 2.0, carbon black 0.4, γ -glycidioxypropyltrimethoxysilane 0.5, fused silica (70% pulverized and 30% spherical) 78, and hydrotalcite 0.05 part was transfer molded and cured to give a composition having fire resistance (UL 94) V-0.

IT 131406-13-8
RL: USES (Uses)
(potting compns. containing, for semiconductors)

RN 131406-13-8 CAPLUS

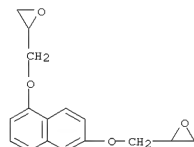
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis-, homopolymer (CA

INDEX NAME)

CM 1

CRN 27610-48-6

CMF C16 H16 O4



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

L28 ANSWER 518 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:104232 CAPLUS
DOCUMENT NUMBER: 118:104232
ORIGINAL REFERENCE NO.: 118:18235a,18238a
TITLE: Epoxy resin potting compositions
INVENTOR(S): Sawamura, Taiji; Teshiba, Toshihiro; Tanaka, Masayuki
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04202521	A	19920723	JP 1990-339722	19901130
JP 3109099	B2	20001113		
PRIORITY APPLN. INFO.:			JP 1990-339722	19901130

AB Potting compns., having solar heat and moisture resistance, and storage stability, contain epoxy resins having naphthalene skeletons, tris(hydroxyphenyl)methane hardeners, and 75-90% fillers, such as fused silica. Thus, a potting composition containing 1,6-diglycidylloxynaphthalene 10.01, tris(3-hydroxyphenyl)methane 7.40, fused silica 77%, and additives.

IT 146058-22-2
RL: USES (Uses)
(potting compns., containing fused silica)

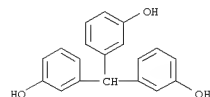
RN 146058-22-2 CAPLUS

CN Phenol, 3,3',3''-methylidynetris-, polymer with 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 145428-07-5

CMF C19 H16 O3



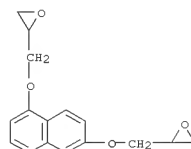
CM 2

CRN 27610-48-6

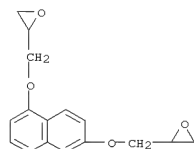
CMF C16 H16 O4

L28 ANSWER 517 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(1 CITINGS)

L28 ANSWER 518 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L28 ANSWER 519 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:82868 CAPLUS
DOCUMENT NUMBER: 118:82868
ORIGINAL REFERENCE NO.: 118:14557a,14560a
TITLE: Internal stress and mechanical properties of epoxy resin coatings cured with acid catalyst in the presence of THF
AUTHOR(S): Ochi, Mitsukazu; Onishi, Kazuaki; Ueda, Shigehisa
CORPORATE SOURCE: Fac. Eng., Kansai Univ., Suita, 564, Japan
SOURCE: Polymer (1992), 33(21), 4550-5
CODEN: POLMAG; ISSN: 0032-3861
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Naphthalene-type epoxy resin was cured with UV irradiation in the presence of THF using sulfonium salt curing catalyst. In this curing process, the epoxy resin was copolymerized with the THF. Thus, evaporation of THF was suppressed substantially. The suppression of solvent evaporation decreased shrinkage of the coatings in the curing process and thus reduced internal stress at the interface between the coatings and the adherend. Fracture energy of these cured films increased with the amount of THF added, and had a maximum value when 10 weight% THF was added. The toughness of the cured resins increased with the introduction of the flexible chains which were formed by the ring-opening reaction of THF.
IT 131406-13-8, Epicon EXA-4032
RL: TEM (Technical or engineered material use); USES (Uses) (coatings, crosslinking of, in presence of THF and sulfonium salt catalyst, internal stress and mech. properties in relation to)
RN 131406-13-8 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, homopolymer (CA INDEX NAME)
CM 1
CRN 27610-48-6
CMF C16 H16 O4



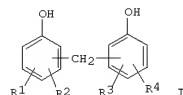
IT 146027-47-6
RL: TEM (Technical or engineered material use); USES (Uses) (coatings, internal stress and mech. properties of, cured with sulfonium salt catalyst)
RN 146027-47-6 CAPLUS

L28 ANSWER 520 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:61268 CAPLUS
DOCUMENT NUMBER: 118:61268
ORIGINAL REFERENCE NO.: 118:10969a,10972a
TITLE: Solder heat-resistant epoxy resin compositions with excellent moldability for sealing semiconductors
INVENTOR(S): Honda, Shiro; Shintani, Shuichi; Sato, Tadahide
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04236218	A	19920825	JP 1991-2970	19910116

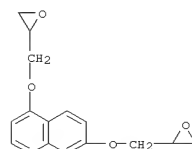
PRIORITY APPLN. INFO.: JP 1991-2970 19910116

GI



AB Title compns. contain (a) epoxy resins, (b) phenolic hardeners containing ≥50% (based on the hardeners) phenols I (R1-4 = H, C1-4 alkyl), and (c) 75-90% (based on total weight) fused silica. Thus, an o-cresol novolak epoxy resin 4.3, 4,4'-bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethylbiphenyl 4.4, bisphenol F 5.0, crushed 9-μm fused silica 61.5, spherical 28-μm fused silica 20.5, γ-glycidioxypropyltrimethoxysilane 1.0, Ph3P 0.2, carnauba wax 0.3, brominated bisphenol A epoxy resin 1.5, Sb2O3 1.0, and C black 0.3 part were dry-blended, melt kneaded, and crushed to give a composition showing spiral flow 94 cm on transfer molding at 175° for 90 s and the resulted flat-packaged device showed no failure after immersing in 260° solder bath.
IT 27610-48-6DP, reaction products with phenolic resins
RL: PREP (Preparation) (preparation of, sealants, with solder heat resistance, for semiconductor devices)
RN 27610-48-6 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)

L28 ANSWER 519 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN Furan, tetrahydro-, polymer with 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)
CM 1
CRN 27610-48-6
CMF C16 H16 O4

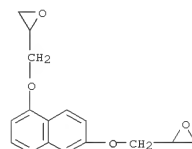


CM 2
CRN 109-99-9
CMF C4 H8 O



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

L28 ANSWER 520 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L28 ANSWER 521 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:61174 CAPLUS
DOCUMENT NUMBER: 118:61174
ORIGINAL REFERENCE NO.: 118:109574,10960a
TITLE: Epoxy resin compositions containing diglycidylloxynaphthalenes for potting
INVENTOR(S): Sawamura, Taiji; Teshiba, Toshihiro; Tanaka, Masayuki
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04202519	A	19920723	JP 1990-339720	19901130
JP 2955013	B2	19991004		
PRIORITY APPLN. INFO.:			JP 1990-339720	19901130

AB The title comps., having good solderability and resistance to heat and water, contain diglycidylloxynaphthalenes, hardeners, silica, and silane coupling agents having secondary amino groups. A potting composition contained

1,6-diglycidylloxynaphthalene 9.92, novolak resin 8.04, fused silica 77, PhNH(CH₂)₃Si(OMe)₃ 0.5, and Ph₃P 0.24%.

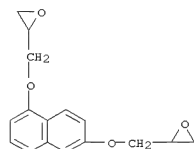
IT 27610-48-6

RL: USES (Uses)

(potting comps. containing)

RN 27610-48-6 CAPLUS

CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)



L28 ANSWER 522 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

L28 ANSWER 522 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:40520 CAPLUS
DOCUMENT NUMBER: 118:40520
ORIGINAL REFERENCE NO.: 118:7361a,7364a
TITLE: Epoxy resin potting compositions for semiconductor devices
INVENTOR(S): Kayaba, Keiji; Otomo, Shigeru; Tanaka, Masayuki
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04202556	A	19920723	JP 1990-339725	19901130
JP 2961889	B2	19991012		
PRIORITY APPLN. INFO.:			JP 1990-339725	19901130

AB The title comps. having good thermal conductivity, solder and heat resistance,

contain diglycidyl-naphthalene-based epoxy resins, curing agents, Si₃N₄, and/or SiC, and optionally, 0.1-20% butadiene-styrene block copolymer. Thus, transfer moldings, manufactured from a composition containing 1,6-diglycidyl-naphthalene epoxy resin 7.4, novolak phenolic resin 6.0, [γ-(glycidioxy)propyl]trimethoxysilane 0.5, Sb₂O₃ 1.5, carnauba wax 0.3, carbon black 0.3, Ph₃P 0.2, Si₃N₄ 41.0, and SiC 41.0%, had thermal conductivity 76 + 10-4 cal/cm.s.°C and good solder and heat resistance.

IT 131406-13-8

RL: TEM (Technical or engineered material use); USES (Uses)

(potting comps., for semiconductors, with good thermal conductivity, solder- and heat-resistant)

RN 131406-13-8 CAPLUS

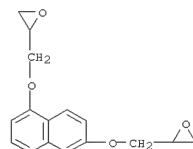
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, homopolymer

(CA INDEX NAME)

CM 1

CRN 27610-48-6

CMF C16 H16 O4



L28 ANSWER 523 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:652827 CAPLUS
DOCUMENT NUMBER: 117:252827
ORIGINAL REFERENCE NO.: 117:43763a,43766a
TITLE: Epoxy resins for heat-resistant potting compositions
INVENTOR(S): Miyazawa, Masashi
PATENT ASSIGNEE(S): Dainippon Inki Kagaku Kogyo K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04072322	A	19920306	JP 1990-183549	19900711
PRIORITY APPLN. INFO.:			JP 1990-183549	19900711

AB The title comps. comprise conventional epoxy resins, crosslinking agents, and glycidyl ethers of specified tetraphenols. A mixture of 100 parts 85:15 mixture of O[C₆H₄-p-C(Me)(C₆H₄OH-p)₂]2 tetraglycidyl ether and bisphenol

A diglycidyl ether, 81 parts Epilcon B-570 crosslinker, and 0.5 part PhCH₂NMe₂ gave cured resins with heat-distortion temperature 185°, and boiling water absorption 0.08, 0.20 and 0.25% in 1, 3, and 5 h, resp.

IT 144860-01-5 144860-04-8

RL: USES (Uses)

(potting comps., heat- and moisture-resistant)

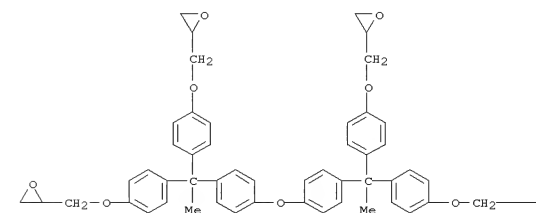
RN 144860-01-5 CAPLUS

CN 1,3-Isobenzofurandione, 3a,4,7,7a-tetrahydromethyl-, polymer with 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis[oxirane] and 2,2',2'',2'''-[oxybis[4,1-phenyleneethyldynebis(4,1-phenyleneoxymethylene)]]tetrakis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 140365-06-6

CMF C52 H50 O9

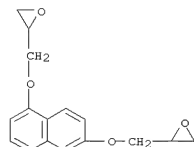


PAGE 1-A

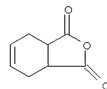
PAGE 1-B



CM 2

CRN 27610-48-6
CMF C16 H16 O4

CM 3

CRN 26590-20-5
CMF C9 H10 O3
CCI IDS

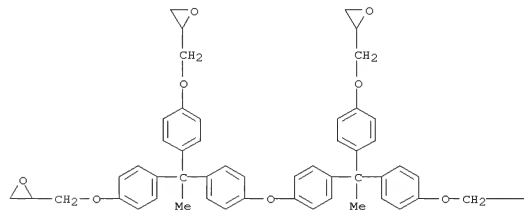
D1-Me

RN 144860-04-8 CAPLUS
CN Formaldehyde, polymer with 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis[oxirane], 2,2',2'',2'''-[oxybis[4,1-phenyleneethyldynebis(4,1-phenyleneoxyethylene)]]tetrakis[oxirane] and phenol (9CI) (CA INDEX NAME)

CM 1

CRN 140365-06-6
CMF C52 H50 O9

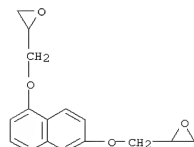
PAGE 1-A



PAGE 1-B



CM 2

CRN 27610-48-6
CMF C16 H16 O4

CM 3

CRN 108-95-2
CMF C6 H6 O

CM 4

CRN 50-00-0
CMF C H2 OH₂C=O

L28 ANSWER 524 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:644018 CAPLUS
DOCUMENT NUMBER: 117:244018
ORIGINAL REFERENCE NO.: 117:42013a,42016a
TITLE: Semiconductor device-encapsulating epoxy resin composition
INVENTOR(S): Sawamura, Yasushi; Teshiba, Toshihiro; Tanaka, Masayuki
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

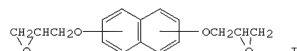
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 501734	A2	19920902	EP 1992-301545	19920225
EP 501734	A3	19921125		
EP 501734	B1	19971015		
R: DE, FR, GB, IT, NL				
JP 04270724	A	19920928	JP 1991-30515	19910226
JP 2501140	B2	19960529		
JP 04270725	A	19920928	JP 1991-32608	19910227
JP 3092176	B2	20000925		
CA 2061801	A1	19920827	CA 1992-2061801	19920225
JP 05067707	A	19930319	JP 1992-39310	19920226
KR 145332	B1	19980715	KR 1992-2977	19920226
US 5567749	A	19961022	US 1994-328617	19941025
PRIORITY APPLN. INFO.:			JP 1991-30513	A 19910226
			JP 1991-30515	A 19910226
			JP 1991-32608	A 19910227
			US 1992-841052	B1 19920225
			US 1994-201776	B1 19940225

AB The composition includes an epoxy resin, a curing agent containing 4,4'-dihydroxybiphenyl, and a filler (70-95 weight%, based on the total weight of the composition).
IT 131406-13-8
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(potting compns. containing, for semiconductor devices)
RN 131406-13-8 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, homopolymer (CA INDEX NAME)
CM 1
CRN 27610-48-6
CMF C16 H16 O4

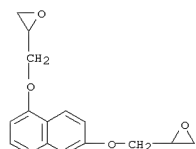
L28 ANSWER 525 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:542010 CAPLUS
DOCUMENT NUMBER: 117:142010
ORIGINAL REFERENCE NO.: 117:24399a,24402a
TITLE: Epoxy resin material for sealing of electronic parts
INVENTOR(S): Hagiwara, Shinsuke; Akagi, Seiichi; Ichimura, Shigeki
PATENT ASSIGNEE(S): Hitachi Kasei Kogyo K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04103617	A	19920406	JP 1990-221707	19900823
PRIORITY APPLN. INFO.:			JP 1990-221707	19900823

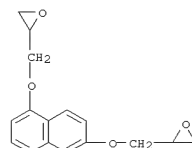
GI



AB The material consists of an I-containing epoxy resin, a compound having ≥ 2 phenolic OH group, and ≥ 5.5 volume% inorg. filler. The material showed good humidity resistance.
IT 27610-48-6D, epoxy phenolic copolymers
RL: USES (Uses)
(potting composition containing, for sealing of electronic part)
RN 27610-48-6 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)

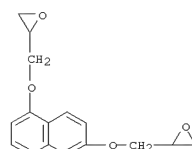


L28 ANSWER 524 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



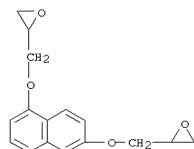
OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD
(9 CITINGS)

L28 ANSWER 526 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:532930 CAPLUS
DOCUMENT NUMBER: 117:132930
ORIGINAL REFERENCE NO.: 117:23061a,23064a
TITLE: Effect of the packing of network chains on the internal stress of epoxy resin coatings
AUTHOR(S): Ochi, Mitsukazu; Kotera, Kazuhiro
CORPORATE SOURCE: Fac. Eng., Kansai Univ., Suita, 564, Japan
SOURCE: Nippon Setchaku Gakkaishi (1992), 28(7), 272-8
CODEN: NSEGE7; ISSN: 0916-4812
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Internal stress of coatings prepared from epoxy resins and their curing agents, having different bulkiness in their skeleton structure, were measured and it was found that the stress was related to the expansion coefficient and the modulus of the cured resins. The specific volume of the cured resins decreased with a decrease of the bulkiness of the resins and curing agents. The expansion coefficient showed decrease whereas the modulus showed increase each corresponding to decrease of the specific volume. These results showed that these properties depend on the packing d. of the cured resins. Internal stress of the coatings was resulted from the cooling shrinkage suppressed by the adhesion between the coatings and adherend. The stress could be quant. estimated by the expansion coefficient and modulus of the coatings in the glassy region.
IT 131406-13-8
RL: USES (Uses)
(crosslinked, Epicon HP-4032DP, coatings, relation between internal stress and network structure in)
RN 131406-13-8 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, homopolymer (CA INDEX NAME)
CM 1
CRN 27610-48-6
CMF C16 H16 O4

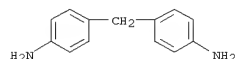


IT 123739-01-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, coatings, relation between internal stress and network

L28 ANSWER 526 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
structure in)
RN 123739-01-5 CAPLUS
CN Benzenamine, 4,4'-methylenebis-, polymer with
2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis[oxirane] (9CI) (CA INDEX
NAME)
CM 1
CRN 27610-48-6
CMF C16 H16 O4



CM 2
CRN 101-77-9
CMF C13 H14 N2



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS
RECORD (1 CITINGS)

L28 ANSWER 527 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:256720 CAPLUS
DOCUMENT NUMBER: 116:256720
ORIGINAL REFERENCE NO.: 116:43541a,43544a
TITLE: Preparation of high modulus epoxy polymer materials
INVENTOR(S): Dewhirst, Kenneth C.
PATENT ASSIGNEE(S): Shell Oil Co., USA
SOURCE: U.S., 7 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5068268	A	19911126	US 1989-405915	19890912
PRIORITY APPLN. INFO.:			US 1989-405915	19890912

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Prepreg materials are prepared from fibrous reinforcement and lightly crosslinked linear title polymers with repeating unit -[ACH2CH(OH)CH2BCH2CH(OH)CH2]- (A,B = NR1, NRXNR, NRYNR, OXO, OYO; R = C1-20 aliphatic, cycloaliph., or aralkyl groups; R1 = R, aryl; X, Y = rigid aromatic of heterocyclic rings and optionally flexible units). Thus, heating

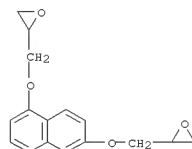
33.42 g 1,6-dihydroxynaphthalene (I) diglycidyl ether with 16.42 g I in presence of 0.045 g monosodium bisphenol A at 160° gave an epoxy resin, which was postcured at 160° for 16 h and 180° for 2 h to give a molding having glass temperature 138°, flexural modulus 490 ksi, and fracture toughness 1500 psi-in^{1/2}.

IT 138721-11-6P 138721-15-0P 138721-16-1P
138746-13-1P

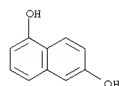
RL: PREP (Preparation)
(preparation of, lightly crosslinked, with high modulus)

RN 138721-11-6 CAPLUS
CN 1,6-Naphthalenediol, polymer with 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis[oxirane] (CA INDEX NAME)

CM 1
CRN 27610-48-6
CMF C16 H16 O4

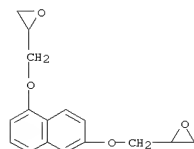


L28 ANSWER 527 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CM 2
CRN 575-44-0
CMF C10 H8 O2

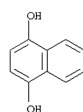


RN 138721-15-0 CAPLUS
CN 1,4-Naphthalenediol, polymer with 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1
CRN 27610-48-6
CMF C16 H16 O4



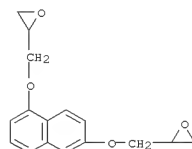
CM 2
CRN 571-60-8
CMF C10 H8 O2



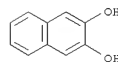
RN 138721-16-1 CAPLUS
CN 2,3-Naphthalenediol, polymer with 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

L28 ANSWER 527 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CRN 27610-48-6
CMF C16 H16 O4

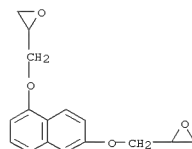


CM 2
CRN 92-44-4
CMF C10 H8 O2

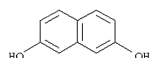


RN 138746-13-1 CAPLUS
CN 2,7-Naphthalenediol, polymer with 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1
CRN 27610-48-6
CMF C16 H16 O4



CM 2
CRN 582-17-2
CMF C10 H8 O2



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS
RECORD
(2 CITINGS)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L28 ANSWER 528 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:153197 CAPLUS
DOCUMENT NUMBER: 116:153197
ORIGINAL REFERENCE NO.: 116:25941a, 25944a
TITLE: Low-temperature-curable polymaleimide compositions
INVENTOR(S): Shinohara, Norio; Otani, Kazuo; Hanyuda, Toshiaki
PATENT ASSIGNEE(S): Showa Highpolymer Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03258819	A	19911119	JP 1990-54941	19900308
JP 06078411	B	19941005		

PRIORITY APPLN. INFO.: JP 1990-54941 19900308

AB The title compns. giving cured products with excellent toughness contain compds. having 21 maleimide group in mol. and compds. having 22 vinylbenzyl ether groups linked to benzene or naphthalene nuclei [prepared by chain extending of polyvalent phenols or naphthols by (0.05-0.5):1 equiv epoxy resins (based on the phenols or naphthols)]. Thus, after 1.0 equiv 2-methylhydroquinone was treated with 0.25 equiv bisphenol A epoxy resin (epoxy equiv 189) at 150° for .apprx.1 h in the presence of Et3N, a solution of 0.75 equiv KOH and 0.75 equiv chloromethylstyrene in aqueous DMSO was added dropwise at 70-80° over 1 h and kept at 70-80° for addnl. 2 h to give a chain-extended methylhydroquinone benzyl ether (I) (viscosity 700 P/25°). A mixture of 100 parts I and 100 parts N,N'-diphenylmethanebis(maleimide) (II) showed gel time 3.5 min (120°). Then, the mixture was molded at 120° for 30 min and postcured at 250° for 5 h to give test specimens showing maximum deflection in bending test 4.0 mm at 23°, 5.4 mm at 270°, compared with 3.2 for specimens containing untreated methylhydroquinone divinylbenzyl ether instead of I.

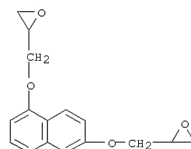
IT 27610-48-6D, reaction product with dihydroxynaphthalene and chloromethylstyrene

RL: MOA (Modifier or additive use); USES (Uses)

(crosslinking agents, for polymaleimides, low-temperature-curable, for good toughness)

RN 27610-48-6 CAPLUS

CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)



L28 ANSWER 529 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:130486 CAPLUS
DOCUMENT NUMBER: 116:130486
ORIGINAL REFERENCE NO.: 116:22109a, 22112a
TITLE: Thermosetting epoxy resin compositions
INVENTOR(S): Shiobara, Toshio; Shimizu, Hisashi
PATENT ASSIGNEE(S): Shin-Etsu Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03237125	A	19911023	JP 1990-32780	19900214

PRIORITY APPLN. INFO.: JP 1990-32780 19900214

AB Thermosetting compns. which are heat-resistant with low moisture absorption and good adhesion, useful in potting, contain 1,6-naphthalenediol diglycidyl ether (I), epoxy resins, phenolic resins, and inorg. fillers. Thus, a mixture of EOCN 1020 (o-cresol novolak epoxy resin) 59, I 1, BREN-S (brominated novolak epoxy resin) 6, TD 2093 (novolak) 34, SiO2 300, coupler 1.5, wax 1.5, carbon black 1.0, and Ph3P 0.8 part had spiral flow (175°, 70 kg/cm2) 22 in., flexural strength 14.5 kg/mm2, flexural modulus 1420 kg/mm2, linear expansion coefficient 1.4 + 10-5/K, glass temperature 167°, moisture absorption 0.30%, and adhesion to 42 alloy 22 kg; vs. 22, 14.6, 1480, 1.5 + 10-5, 167, 0.35, and 10, resp., without I.

IT 131406-13-8
RL: MOA (Modifier or additive use); USES (Uses)
(crosslinking agents, for epoxy resin potting compns.)

RN 131406-13-8 CAPLUS

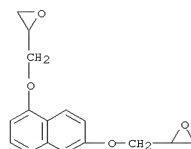
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, homopolymer
(CA

INDEX NAME)

CM 1

CRN 27610-48-6

CMF C16 H16 O4

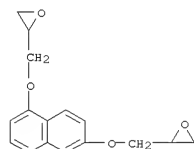


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS
RECORD
(1 CITINGS)

L28 ANSWER 530 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:84983 CAPLUS
DOCUMENT NUMBER: 116:84983
ORIGINAL REFERENCE NO.: 116:14483a,14486a
TITLE: Epoxy resin potting compositions for semiconductor devices
INVENTOR(S): Honda, Shiro; Sawamura, Yasushi; Tanaka, Masayuki; Kayaba, Keiji; Teshiba, Toshihiro
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Eur. Pat. Appl., 32 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 450944	A2	19911009	EP 1991-302946	19910404
EP 450944	A3	19920115		
EP 450944	B1	19951011		
R: DE, FR, GB, IT, NL				
JP 04050255	A	19920219	JP 1990-159233	19900618
JP 2964559	B2	19991018		
JP 04202520	A	19920723	JP 1990-339721	19901130
JP 2964634	B2	19991018		
CA 2039669	A1	19911005	CA 1991-2039669	19910403
JP 04218523	A	19920810	JP 1991-70887	19910403
JP 07033429	B	19950412		
JP 04226123	A	19920814	JP 1991-145147	19910618
JP 2541712	B2	19961009		
US 5360837	A	19941101	US 1992-990000	19921211
PRIORITY APPLN. INFO.:				
			JP 1990-90018	A 19900404
			JP 1990-159231	A 19900618
			JP 1990-159233	A 19900618
			JP 1990-339721	A 19901130
			US 1991-675491	BI 19910326

AB The title compns. contain bisphenol- and naphthalene-based epoxy resins, curing agents, and 75-90% fillers containing 50-97% fused silica [average particle size (D) <10 μ m] and 50-3% spherical fused silica (D <4 μ m). Thus a mixt of 90:10 crushed fused silica (D 6.5 mm)-spherical fused silica (D 2.1 mm) 81, silane coupler 0.7, brominated novolak epoxy resin 2.3, Sb2O3 1.5, carbon black 0.3, carnauba wax 0.3, 1,6-bis(glycidyloxy)naphthalene 6.6, alkylallylphenol resin 7.7, and Ph3P 0.2% had soldering heat resistance (260 $^{\circ}$) 0 defects out of 16.
IT 27610-48-6
RL: USES (Uses)
(in fire-resistant potting compns.)
RN 27610-48-6 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)

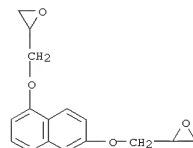


OS.CITING REF COUNT: 7
RECORD
THERE ARE 7 CAPLUS RECORDS THAT CITE THIS
(12 CITINGS)

L28 ANSWER 531 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:72209 CAPLUS
DOCUMENT NUMBER: 116:72209
ORIGINAL REFERENCE NO.: 116:12149a,12152a
TITLE: Silver halide photographic material
INVENTOR(S): Takamukai, Yasuhiko; Hanyu, Takeshi
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03044635	A	19910226	JP 1989-181305	19890712
PRIORITY APPLN. INFO.:				JP 1989-181305 19890712

AB In the title material, one side of the support has photosensitive emulsion layers, the other side of the support has at least one antistatic layer containing a water-soluble polymer, a hydrophobic polymer, and a reaction product of a hardening agent. The hardening agent is either an isocyanate precursor or a compound containing 2 epoxy groups. The use of the title material reduces pin-hole defects.
IT 27610-48-6
RL: USES (Uses)
(hardening agent, for photog. material)
RN 27610-48-6 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)



L28 ANSWER 532 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:61120 CAPLUS
DOCUMENT NUMBER: 116:61120
ORIGINAL REFERENCE NO.: 116:10559a,10562a
TITLE: Epoxy resin composition for semiconductor sealing
INVENTOR(S): Ohta, Ken/ Kosaka, Wataru/ Yanagisawa, Kenichi
PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 78 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 428871	A2	19910529	EP 1990-120007	19901018
EP 428871	A3	19920429		
EP 428871	B1	19980318		
R: DE, FR, GB, NL				
US 5143951	A	19920901	US 1990-603076	19901025
JP 03220227	A	19910927	JP 1990-308875	19901116
JP 03220228	A	19910927	JP 1990-308876	19901116
JP 03220229	A	19910927	JP 1990-308877	19901116
JP 03223327	A	19911002	JP 1990-308878	19901116
JP 2983613	B2	19991129		
JP 03263423	A	19911122	JP 1990-308879	19901116
JP 2986900	B2	19991206		
KR 157058	B1	19981201	KR 1990-18962	19901122
PRIORITY APPLN. INFO.:				
			JP 1989-301973	A 19891122
			JP 1989-301974	A 19891122
			JP 1989-301975	A 19891122
			JP 1989-309303	A 19891130
			JP 1990-39603	A 19900222

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The title composition, with good soldering and impact resistance and moldability, comprises epoxy resin, a reaction product of a carboxy or epoxy group-containing or -terminated siloxane and aphenolic resin as curing agent, inorg. fillers, and curing accelerators. A composition was prepared from a mixture of cresol novolak epoxy resin 90, brominated phenol novolak epoxy resin 10, trimethylsilyl-terminated di-Me, Me Ph, glycidylxypropyl Me siloxane-phenol novolak reaction product 60, fused silica 450, Sb2O3 2.5, silane coupling agent 2, triphenylphosphine 2, carbon black 3, and carnauba wax 3 parts. The composition had spiral blow 95 cm and flash length <0.5 mm with satisfactory moisture and soldering resistance.
IT 27610-48-6
RL: USES (Uses)
(potting compns. containing, crosslinking agents for, siloxane-modified phenolic resins as)
RN 27610-48-6 CAPLUS

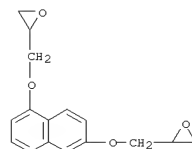
L28 ANSWER 533 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:43219 CAPLUS
DOCUMENT NUMBER: 116:43219
ORIGINAL REFERENCE NO.: 116:7435a,7438a
TITLE: Electrically connected laminate manufacture
INVENTOR(S): Yokono, Hitoshi/ Arima, Hideo/ Inoue, Takashi/
Kitamura, Naoya/ Matsuyama, Haruhiko/ Oka, Hitoshi/
Kataoka, Fumio/ Shoji, Fusaji/ Murooka, Hideyasu/
Kyoi, Masayuki
PATENT ASSIGNEE(S): Hitachi, Ltd., Japan
SOURCE: Ger. Offen., 56 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4108986	A1	19910926	DE 1991-4108986	19910319
JP 04206638	A	19920728	JP 1990-330515	19901130
JP 3126726	B2	20010122		
JP 04211194	A	19920803	JP 1991-25983	19910220
JP 2841888	B2	19981224		
JP 10135634	A	19980522	JP 1991-55029	19910319
US 5388328	A	19950214	US 1994-187546	19940128
PRIORITY APPLN. INFO.:				
			JP 1990-69259	A 19900319
			JP 1990-330515	A 19901130
			US 1991-672117	B1 19910319
			US 1993-37543	A3 19930322

AB The title laminates, useful in very large integrated circuits, terminal resistors, condensers, etc., are prepared by filling the void spaces between circuits with solvent-free, heat-resistant lacquers and curing. Numerous laminate configurations are illustrated. A circuit prepared by etching sputtered Cr-Cu films through photoresists was placed in an evacuated silicone rubber container, sprayed with a warm benzocyclobutene derivative resin, and the resin was cured at >250° to give a circuit board with dielec. constant 2.6.

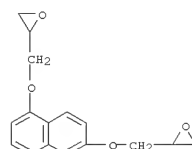
IT 123739-01-5 131406-13-8, HP 4032D
138532-63-5
RL: TEM (Technical or engineered material use); USES (Uses)
(dielec. coatings, solvent-free, for laminated elec. circuits)
RN 123739-01-5 CAPLUS
CN Benzenamine, 4,4'-methylenebis-, polymer with 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)
CM 1
CRN 27610-48-6
CMF C16 H16 O4

L28 ANSWER 532 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)

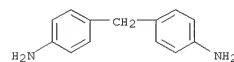


OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L28 ANSWER 533 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

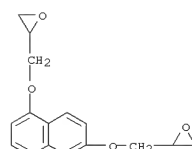


CM 2
CRN 101-77-9
CMF C13 H14 N2



RN 131406-13-8 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, homopolymer (CA INDEX NAME)

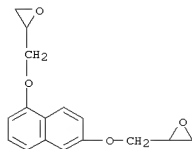
CM 1
CRN 27610-48-6
CMF C16 H16 O4



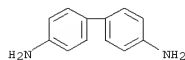
RN 138532-63-5 CAPLUS
CN [1,1'-Biphenyl]-4,4'-diamine, polymer with 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1
CRN 27610-48-6

L28 ANSWER 533 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CMF C16 H16 O4



CM 2
CRN 92-87-5
CMF C12 H12 N2



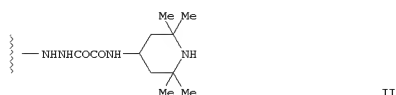
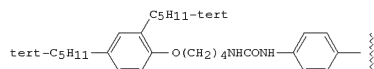
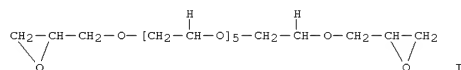
OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L28 ANSWER 535 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1991:666681 CAPLUS
DOCUMENT NUMBER: 115:266681
ORIGINAL REFERENCE NO.: 115:451294,45132a
TITLE: Silver halide photographic material having antistatic layer containing epoxy type hardener and triphenylphosphine
INVENTOR(S): Yamada, Taketoshi; Hanyu, Takeshi; Takamukai, Yasuhiko
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03059648	A	19910314	JP 1989-197189	19890728

PRIORITY APPLN. INFO.: JP 1989-197189 19890728

GI



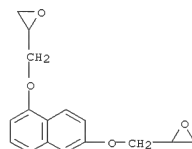
AB The photog. plastic film support has an antistatic layer comprising (1) a triphenylphosphine, and (2) a reaction product of a water-soluble electroconductive polymer, hydrophobic polymer particles, and an epoxy type hardening agent. The antistatic layer has a stable antistatic effect which is not badly affected by the incorporation of the hydrazine or tetrazolium compds. Thus, butenedioic acid-sodium p-styrenesulfonate copolymer, Bu acrylate-Bu methacrylate-methacrylic acid-styrene copolymer, I and triphenylphosphine were treated to give an antistatic coating. A photog. film consisting of Ag halide emulsion layer containing II, and the antistatic coating layer showed good storage stability.
IT 136356-51-9

L28 ANSWER 534 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:22183 CAPLUS
DOCUMENT NUMBER: 116:22183
ORIGINAL REFERENCE NO.: 116:3907a,3910a
TITLE: Potting compositions for semiconductor devices
INVENTOR(S): Kondo, Akihiro; Ota, Masaru; Yanagisawa, Kenichi
PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03197526	A	19910828	JP 1989-335181	19891226
JP 2744500	B2	19980428	JP 1989-335181	19891226

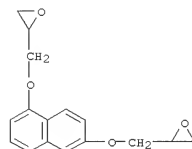
PRIORITY APPLN. INFO.: JP 1989-335181 19891226

AB Potting compns. with good moldability and resistance to soldering heat and thermal shock contain epoxy resins containing specified novolak epoxy resins, curing agents containing 30-100% reaction products of phenolic novolak with specified Si compds., curing catalysts, and inorg. fillers. A mixture of p-hydroxybenzaldehyde-tert-butylcresol novolak polyglycidyl ether 40, naphthalenediol diglycidyl ether 50, brominated bisphenol A epoxy resin 10, novolak-(glycidylloxy)propyl siloxane reaction product 70, fused silica 500, Sb2O3 10, silane coupler 2, Ph3P 2, carbon black 3, and carnauba wax 3 parts was transfer-molded at 175° for 2 min and postcured at 175° for 8 h.
IT 27610-48-6
RL: MOA (Modifier or additive use); USES (Uses) (crosslinking agents, for epoxy resin potting compns.)
RN 27610-48-6 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)

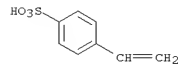


L28 ANSWER 535 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RL: USES (Uses) (antistatic layer contg., in photog. film)
RN 136356-51-9 CAPLUS
CN 2-propenoic acid, butyl ester, polymer with ethenylbenzene, ethyl 2-propenoate, 2-hydroxyethyl 2-propenoate, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis[oxirane] and sodium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

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CRN 27610-48-6
CMF C16 H16 O4

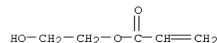


CM 2
CRN 2695-37-6
CMF C8 H8 O3 S . Na



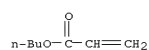
● Na

CM 3
CRN 818-61-1
CMF C5 H8 O3



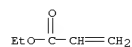
CM 4

CRN 141-32-2
CMF C7 H12 O2



CM 5

CRN 140-88-5
CMF C5 H8 O2



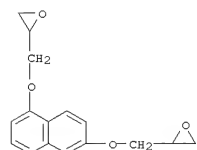
CM 6

CRN 100-42-5
CMF C8 H8



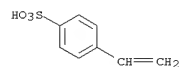
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CM 2

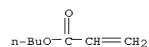
CRN 2695-37-6
CMF C8 H8 O3 S . Na



● Na

CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

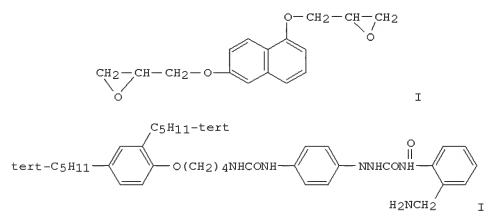
CRN 100-42-5
CMF C8 H8

L28 ANSWER 536 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1991:594131 CAPLUS
DOCUMENT NUMBER: 115:194131
ORIGINAL REFERENCE NO.: 115:32961a, 32964a
TITLE: Silver halide photographic material having antistatic layer containing epoxy type hardener and tetrabromoammonium iodide
INVENTOR(S): Yamada, Taketoshi; Hanyu, Takeshi; Takamukai, Yasuhiko
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKKXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

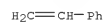
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03059649	A	19910314	JP 1989-197190	19890728

PRIORITY APPLN. INFO.: JP 1989-197190 19890728

GI

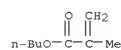


AB The photog. plastic film support has an antistatic layer comprising (1) a tetrabromoammonium iodide(sic), and (2) a reaction product of a water-soluble electroconductive polymer, hydrophobic polymer particles, and an epoxy type hardening agent. The antistatic layer has an excellent antistatic effect which is not badly affected by the incorporation of the hydrazine or tetrazolium compds. Thus, poly(sodium p-styrenesulfonate), Bu acrylate-Bu methacrylate-methacrylic acid-styrene copolymer, I, and tetrabromoammonium iodide(sic) were treated to give an antistatic coating.
A photog. film consisting of Ag halide emulsion containing II, and the antistatic coating layer showed good storage stability.
IT 136356-43-9 136356-44-0
RL: USES (Uses)
(antistatic layer containing, in photog. film)
RN 136356-43-9 CAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, butyl 2-propenoate, ethenylbenzene,



CM 5

CRN 97-88-1
CMF C8 H14 O2



CM 6

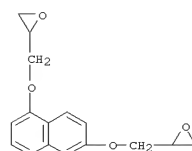
CRN 79-41-4
CMF C4 H6 O2



RN 136356-44-0 CAPLUS
CN 2-Butenedioic acid, polymer with butyl 2-propenoate, ethenylbenzene, 2-methyl-2-propenoic acid, 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis[oxirane] and sodium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

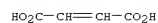
CM 1

CRN 27610-48-6
CMF C16 H16 O4



CM 2

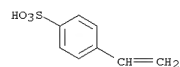
CRN 6915-18-0
CMF C4 H4 O4



CM 3

CRN 2695-37-6

CMF C8 H8 O3 S . Na

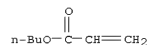


● Na

CM 4

CRN 141-32-2

CMF C7 H12 O2



CM 5

CRN 100-42-5

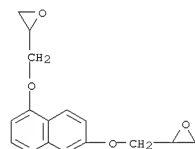
CMF C8 H8



CM 6

CRN 79-41-4

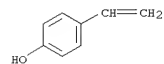
CMF C4 H6 O2



CM 3

CRN 2628-17-3

CMF C8 H8 O



RN 134290-75-8 CAPLUS
CN Phenol, 4-ethenyl-, polymer with BREN-S, 2,2',2''-[methylidynetris(4,1-phenyleneoxymethylene)]tris[oxirane] and 2,2''-[1,6-naphthalenediylbis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 93195-67-6

CMF Unspecified

CCI FMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 43224-82-4

CMF C28 H28 O6

L28 ANSWER 537 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1991:410189 CAPLUS
DOCUMENT NUMBER: 115:10189
ORIGINAL REFERENCE NO.: 115:1955a,1958a
TITLE: Epoxy resin compositions for sealing semiconductors
INVENTOR(S): Takahashi, Ichiro; Ito, Hiromi; Sawada, Yuko
PATENT ASSIGNEE(S): Mitsubishi Electric Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02265916	A	19901030	JP 1989-88709	19890406
PRIORITY APPLN. INFO.:			JP 1989-88709	19890406

AB Comps. for the title use contain resins based on 1,6-dihydroxynaphthalene diglycidyl ether (I) and/or 2,7-dihydroxynaphthalene diglycidyl ether (II)

and curing agents based on p-hydroxystyrene resins. Thus, I-based resin (Epiclon EXA-4032) 100, BREN S (brominated phenol novolak type epoxy resin) 10, and Maruka Lyncur M (p-hydroxystyrene resin) 88.2 parts were blended at 130° to give homogeneous mixture This mixture was blended with Ph3P 1.5, BF-100 (spherical silica) 893, Sb2O3 10, KRM403 (silane coupling agent) 7, natural wax 1.5, and carbon black 5 parts at 100° and pelletized. The pellets were molded and cured to give test plate having flexural strength 6.2 kg/mm2, glass transition temperature

210°, moisture absorption 0.20% after 500 h at 85° and 85% relative humidity, weight reduction 0.46% after 1000 h at 200°, and excellent heat shock-resistance.

IT 134290-73-6P 134290-75-8P 134290-76-9P

RL: PREP (Preparation)
(preparation of, for sealing semiconductors)

RN 134290-73-6 CAPLUS

CN Phenol, 4-ethenyl-, polymer with BREN-S and 2,2''-[1,6-naphthalenediylbis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 93195-67-6

CMF Unspecified

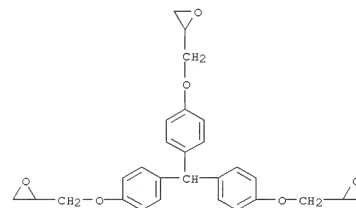
CCI FMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 27610-48-6

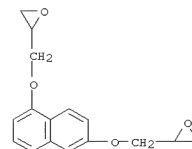
CMF C16 H16 O4



CM 3

CRN 27610-48-6

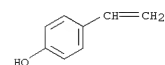
CMF C16 H16 O4



CM 4

CRN 2628-17-3

CMF C8 H8 O



RN 134290-76-9 CAPLUS
CN Phenol, 4-ethenyl-, polymer with BREN-S, EOCN 1020 and 2,2''-[1,6-naphthalenediylbis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 104841-49-8

L28 ANSWER 537 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

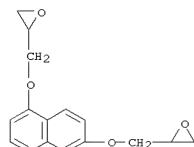
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CRN 93195-67-6
CMF Unspecified
CCI PMS, MAN

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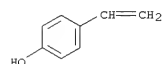
CM 3

CRN 27610-48-6
CMF C16 H16 O4



CM 4

CRN 2628-17-3
CMF C8 H8 O



L28 ANSWER 538 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1991:25470 CAPLUS
DOCUMENT NUMBER: 114:25470
ORIGINAL REFERENCE NO.: 114:4527a,4530a
TITLE: Heat- and moisture-resistant epoxy resin compositions with fluidity for sealing of semiconductor devices
INVENTOR(S): Fujimoto, Takamitsu; Kanegae, Yuzo; Kita, Shuichi; Shinoda, Atsuko; Moriwaki, Norimoto
PATENT ASSIGNEE(S): Mitsubishi Electric Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

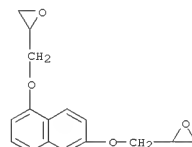
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02110958	A	19900424	JP 1988-264652	19881019
PRIORITY APPLN. INFO.:			JP 1988-264652	19881019

AB Title compns. contain 1,6-bis(glycidylmethoxy)naphthalene (I), phenol novolaks (softening temperature (T) 90-130°) at OH/(epoxy in I) 0.8-1.2, inorg. fillers and crosslinking accelerators. Thus, Epilcon EKA 4032 (I, 147 epoxy equivalent) 90, a phenol novolak (T 91°, 102-107 phenolic OH equivalent) 68, BREN 10, powdered fused silica 820, PPh3 1.2, C black 1, carnauba wax 1.5, Sb2O3 10, and KBM 403E (epoxy silane) 6.6 parts were mixed, roll-kneaded at 80-110° for 5-7 min, pulverized, and molded to give a test piece having bending strength 20 kg/mm2, glass transition temperature 153°, and spiral flow (EMMI) 65 cm, vs. 18, 155, and 47, resp., for the test piece using cresol novolak epoxy resin instead of I.
IT 131406-13-8D, reaction products with phenol novolaks
RL: USES (Uses)
(sealants, for semiconductor devices, with fluidity and heat and moisture resistance)
RN 131406-13-8 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, homopolymer (CA

INDEX NAME)

CM 1

CRN 27610-48-6
CMF C16 H16 O4



L28 ANSWER 538 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

L28 ANSWER 539 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1990:533894 CAPLUS
DOCUMENT NUMBER: 113:133894
ORIGINAL REFERENCE NO.: 113:22765a,22768a
TITLE: Epoxy resin composition for sealing semiconductor device
INVENTOR(S): Shinoda, Atsuko; Fujimoto, Takamitsu; Kanegae, Yuzo; Kita, Shuichi; Moriwaki, Norimoto
PATENT ASSIGNEE(S): Mitsubishi Electric Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02088621	A	19900328	JP 1988-243111	19880927
JP 06057740	B	19940803		
PRIORITY APPLN. INFO.:			JP 1988-243111	19880927

AB Title composition, having excellent heat, moisture, and thermal shock resistance and fluidity, is composed of (1) an epoxy resin comprising 0.05-10 parts 1,6-diglycidyl-naphthalene (I) and 1 part an epoxy resin having ≥2 epoxides in a mol. except I, (2) a crosslinking agent, and (3) an inorg. filler. Thus, I 8, EOCN 1020 (cresol novolak type epoxy resin having epoxy equivalent 190-210) 82, BREN 10, a phenol novolak 52, SiO2 661, Ph3P 1.2, C black 1, carnauba wax 1, Sb2O3 10, and KBM 403 6.6 parts were blended, roll-kneaded at 80-100° for 5-7 min, and molded to give a tablet, which was transfer-molded onto a monitor chip and post-cured at 175° for 8 h to give a test piece having flexural modulus 2010 kg/cm2, spiral flow 57 cm, and good thermal shock resistance in -65-150° heat cycle test, vs. 2010, 51, and poor, resp., for the test piece without I.
IT 129458-76-0P 129458-77-1P 129458-78-2P
RL: PREP (Preparation)
(phenol novolak-crosslinked, preparation of, sealants, heat- and moisture- and thermal shock-resistant, with fluidity, for semiconductor devices)
RN 129458-76-0 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, polymer with EOCN 1020 and EPPN 201 (9CI) (CA INDEX NAME)

CM 1

CRN 104841-49-8
CMF Unspecified
CCI PMS, MAN

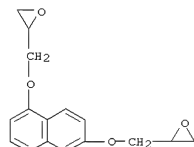
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CM 2

CRN 81775-74-8
CMF Unspecified
CCI PMS, MAN

L28 ANSWER 539 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
 *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3
 CRN 27610-48-6
 CMF C16 H16 O4



RN 129458-77-1 CAPLUS
 CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, polymer with BREN and EPFN 201 (9CI) (CA INDEX NAME)

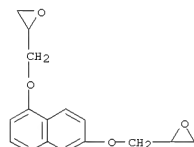
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 CRN 81775-74-8
 CMF Unspecified
 CCI FMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

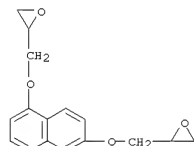
CM 2
 CRN 68859-34-7
 CMF Unspecified
 CCI FMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3
 CRN 27610-48-6
 CMF C16 H16 O4



L28 ANSWER 539 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
 RL: PREP (Preparation)
 (prepn. of, sealants, heat- and moisture- and thermal shock-resistant, with fluidity, for semiconductor devices)
 RN 27610-48-6 CAPLUS
 CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)



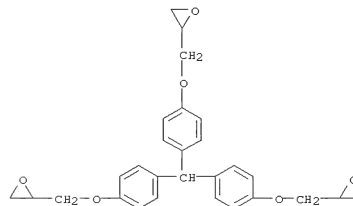
L28 ANSWER 539 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 129458-78-2 CAPLUS
 CN Oxirane, 2,2',2''-[methylidymetris(4,1-phenyleneoxymethylene)]tris-, polymer with BREN and 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

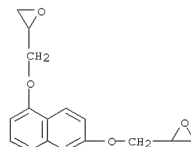
CM 1
 CRN 68859-34-7
 CMF Unspecified
 CCI FMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2
 CRN 43224-82-4
 CMF C28 H28 O6



CM 3
 CRN 27610-48-6
 CMF C16 H16 O4

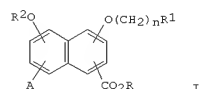


IT 27610-48-6DP, reaction products with bisphenol epoxy resins and phenol novolaks

L28 ANSWER 540 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1990:70021 CAPLUS
 DOCUMENT NUMBER: 112:70021
 ORIGINAL REFERENCE NO.: 112:11763a,11766a
 TITLE: Treatment of conditions requiring enhanced oxygen availability to mammalian tissues with naphthoic acid derivatives
 INVENTOR(S): Suh, John T.; Pendelton, Robert G.; Pendley, Charles E., II; Yu, Kin T.; Menard, Paul R.; Schreiber, Alain B.
 PATENT ASSIGNEE(S): Rorer Pharmaceutical Corp., USA
 SOURCE: U.S., 8 pp.
 DOCUMENT TYPE: CODEN: USXXAM
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

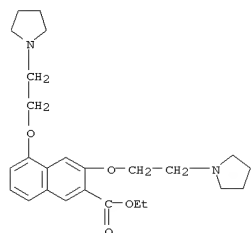
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4861795	A	19890829	US 1988-211486	19880623
US 4948582	A	19900814	US 1989-333520	19890511
EP 347932	A2	19891227	EP 1989-111470	19890623
EP 347932	A3	19920304		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AU 8936786	A	19900111	AU 1989-36786	19890623
JP 02045419	A	19900215	JP 1989-159824	19890623
US 5015663	A	19910514	US 1990-488190	19900305
PRIORITY APPLN. INFO.:			US 1988-211486	A3 19880623
			US 1989-333520	A3 19890511

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
 OTHER SOURCE(S): CASREACT 112:70021; MARPAT 112:70021
 GI



AB A naphthoic acid derivative I [R = H, alkyl, aryl, aminoalkyl; R1 = H, alkyl, (alkyl)amino; R2 = H, acyl, aminoacyl, (substituted) alkyl; A = H, halo, CF3, OH, O2CR, aminoalkyl, aryl, etc.; n = 0-6] is administered orally or parenterally to a mammal to increase the blood level of 2,3-diphosphoglyceric acid and thereby increase the O-delivering capacity of the blood to the tissues for treatment of respiratory distress syndrome, shock,, anemia, etc. Thus, Et 3,5-dihydroxy-2-naphthoate was treated with PhCH2Cl and Na in EtOH to produce the 5-O-benzyl derivative, which was condensed with 2-piperidinoethyl chloride and hydrogenated over Pd/C to yield Et 5-hydroxy-3-(2-piperidinoethoxy)-2-naphthoate-HCl. 3-Hydroxy-5-(1-undecen-11-yloxy)-2-naphthoic acid at 100 μM caused 100% inhibition of 2,3-diphosphoglycerate phosphatase in vitro.
 IT 125001-69-6P

L28 ANSWER 540 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of and oxygen transport to animal tissues enhancement by)
 RN 125001-69-6 CAPLUS
 CN 2-Naphthalenecarboxylic acid, 3,5-bis[2-(1-pyrrolidinyl)ethoxy]-, ethyl ester, hydrochloride (1:1) (CA INDEX NAME)

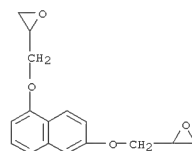


● HCl

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

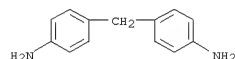
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L28 ANSWER 541 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1989:615389 CAPLUS
 DOCUMENT NUMBER: 111:215389
 ORIGINAL REFERENCE NO.: 111:35739a,35742a
 TITLE: Internal stress in epoxy resin networks containing naphthalene structures
 AUTHOR(S): Ochi, Mitsukazu; Tsuboi, Takumi; Kageyama, Hiroyuki; Shimbo, Masaki
 CORPORATE SOURCE: Fac. Eng., Kansai Univ., Suita, 564, Japan
 SOURCE: Nippon Setchaku Kyokaiishi (1989), 25(6), 222-7
 CODEN: NSKSAZ; ISSN: 0001-8201
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese
 AB Epoxy resins derived from bisphenol A and naphthalene 1,6-diglycidyl ether
 (I) were cured with 4,4'-diaminodiphenylmethane or 1,5-diaminonaphthalene (II) as curing agent and the internal stress and viscoelastic behavior of the crosslinked resins were examined. Introduction of the naphthalene structure increased the glass transition temperature of the cured resin.
 This effect was greater with II than with I, presumably due to the stronger constraint of the naphthalene rings in the curing agent to the crosslinking point. Introduction of I increased the shear modulus in the glassy region of the cured resin while the linear expansion coefficient was decreased with a slight decrease in the internal stress. In contrast, introduction of II had little influences on these properties.
 IT 123739-01-5 123739-03-7
 RL: PRP (Properties)
 (Internal stress of, glass transition temperature and modulus and expansion in relation to)
 RN 123739-01-5 CAPLUS
 CN Benzenamine, 4,4'-methylenebis-, polymer with 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis[oxirane] (9CI) (CA INDEX NAME)
 CM 1
 CRN 27610-48-6
 CMF C16 H16 O4



CM 2
 CRN 101-77-9

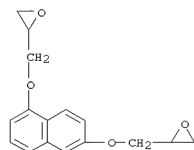
L28 ANSWER 541 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
 CMF C13 H14 N2



RN 123739-03-7 CAPLUS
 CN 1,5-Naphthalenediamine, polymer with 2,2'-[1,6-naphthalenediylbis(oxyethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

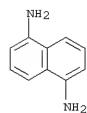
CM 1

CRN 27610-48-6
 CMF C16 H16 O4



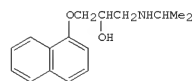
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CRN 2243-62-1
 CMF C10 H10 N2



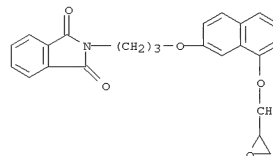
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
 (1 CITINGS)

L28 ANSWER 542 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1983:432661 CAPLUS
 DOCUMENT NUMBER: 99:32661
 ORIGINAL REFERENCE NO.: 99:5005a,5008a
 TITLE: Radioimmunoassay of propranolol
 AUTHOR(S): Eller, Thomas D.; Knapp, Daniel R.; Walle, Thomas
 CORPORATE SOURCE: Dep. Pharmacol., Medical Univ. South Carolina, Charleston, SC, 29425, USA
 SOURCE: Analytical Chemistry (1983), 55(9), 1572-5
 CODEN: ANCHAM; ISSN: 0003-2700
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI

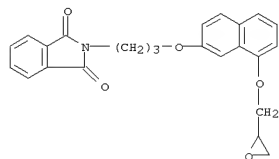


I

AB A series of specific antibodies against dl-propranolol (I) [13013-17-7] was developed by conjugation of the novel 5'-, 7'-, and 8'-(3-aminopropoxy)propranolol derivs. to succinylated bovine serum albumin for radioimmunoassay of I. By preservation of an intact side chain in the antigen, significantly improved specificity to parent drug vs. inactive side chain metabolites was demonstrated. The radioimmunoassay based on these antibodies is capable of detecting as little as 20 pg of I in a toluene extract of tissue or plasma. Samples
 run in parallel with gas chromatog.-mass spectrometry (GC-MS) measurements showed excellent agreement between the 2 methods in both dogs and humans. Comparison of direct plasma assay of human samples with GC-MS anal. indicated elevated results by radioimmunoassay due to high levels of an unknown conjugate of 4'-hydroxypropranolol which is eliminated by the extraction
 IT 85926-63-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and amination with isopropylamine)
 RN 85926-63-2 CAPLUS
 CN 1H-Isoindole-1,3(2H)-dione, 2-[3-[[8-(2-oxiranylmethoxy)-2-naphthalenyl]oxy]propyl]- (CA INDEX NAME)

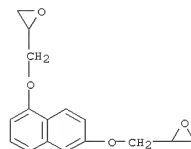


L28 ANSWER 542 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
IT 85926-63-2DP, albumin conjugates
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for radioimmunoassay of propranolol)
RN 85926-63-2 CAPLUS
CN 1H-Isindole-1,3(2H)-dione, 2-[3-[[8-(2-oxiranylmethoxy)-2-naphthalenyl]oxy]propyl]- (CA INDEX NAME)

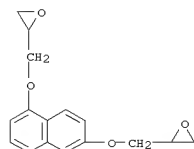


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

L28 ANSWER 543 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1970:56177 CAPLUS
DOCUMENT NUMBER: 72:56177
ORIGINAL REFERENCE NO.: 72:10305a,10308a
TITLE: Thermal analysis of nitro-substituted epoxide polymers
AUTHOR(S): Fleming, Gerald J.
CORPORATE SOURCE: U. S. Nav. Ordnance Lab., Silver Spring, MD, USA
SOURCE: Journal of Applied Polymer Science (1969), 13(12), 2579-92
CODEN: JAPNAB; ISSN: 0021-8995
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The thermal properties of a number of nitro-substituted and analogous non-nitrosubstituted epoxide polymers were studied. Dramatic increases in char yield and decreases in maximum rate of weight loss were observed for the nitrosubstituted systems compared to their non-nitrated analogs. These effects were enhanced when highly functional and highly aromatic epoxide resins were used. The sample size and heating rate employed had pronounced effects upon the amount of char formed during thermal degradation. Anal. of char residues indicates ring formation for the nitro-substituted systems during pyrolysis.
IT 27610-48-6P
RL: PREP (Preparation)
(cured by nitro compds., char yield and thermal properties of)
RN 27610-48-6 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)



L28 ANSWER 544 OF 544 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1961:11119 CAPLUS
DOCUMENT NUMBER: 55:11119
ORIGINAL REFERENCE NO.: 55:2166g-4,2167a
TITLE: Correlation between structure and thermal stability of epoxy resins
AUTHOR(S): Ehlers, Gerhard F. L.
CORPORATE SOURCE: Wright Patterson Air Force Base, OH
SOURCE: Polymer (1960), 1, 304-314
CODEN: POLMAG; ISSN: 0032-3861
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Thermal stability of cured epoxy resins was investigated in terms of weight loss and Vicat heat distortion temperature. Resins used were: 1,1,3,3-tetrakis(p-glycidyloxyphenyl) ethane, 3,4-epoxy-6-methylcyclohexylmethyl, 3,4-epoxy-6-methylcyclohexanecarboxylate, and the diglycidyl ethers of the following 6 phenols: Bisphenol A, 1,5- and 1,6-naphthalenediol, 3,3'- and 4,4'-dihydroxybiphenyl, and 4,4'-dihydroxydiphenyl sulfone. The Bisphenol A resin had an epoxy equivalent of 470. Amines, phenols, anhydrides, and BF3-EtNH2 were employed as curing agents. In one series α -pinene oxide, dipentene oxide, and allyl glycidyl ether were used as reactive diluents. The amines, phenols, and anhydrides (in order of descending Vicat temperature measured) were: 4,4'-diaminodiphenyl sulfone, benzidine, 2,4,6-triaminotoluene, N,N-diallylmelamine, 3,3'-diaminodiphenyl sulfone, m- and p-phenylenediamine, diethylenetriamine, ethylenediamine; phloroglucinol, 1,1,2,2-tetrakis(p-hydroxyphenyl) ethane, 4,4'-dihydroxydiphenyl sulfone, 1,6-, 1,5-, and 2,7-naphthalenediol, resorcinol, hydroquinone; pyromellitic dianhydride, maleic, citraconic, hexahydrophthalic, phthalic, succinic, and chlorendic anhydrides. Anhydride-cured resins generally gave the highest Vicat temperature
IT 27610-48-6, Naphthalene, 1,6-bis(2,3-epoxypropoxy)-(epoxy resins containing, thermal stability of)
RN 27610-48-6 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)



=> fil reg

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
262.45	1036.49

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
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FILE 'REGISTRY' ENTERED AT 11:06:47 ON 12 FEB 2010
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COPYRIGHT (C) 2010 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
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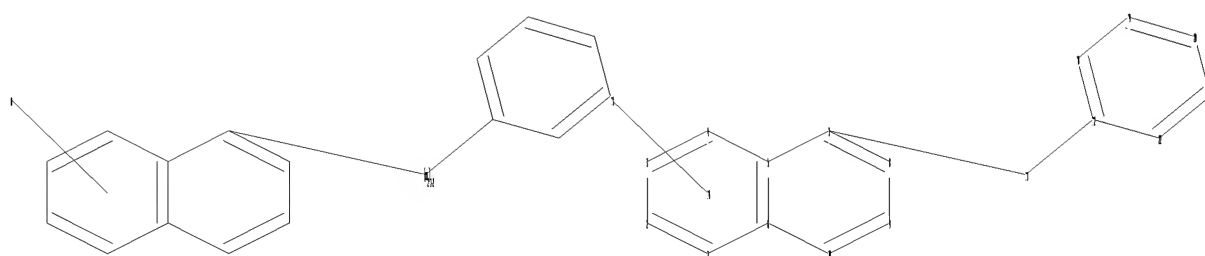
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DICTIONARY FILE UPDATES: 10 FEB 2010 HIGHEST RN 1205743-44-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of



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11 13

ring nodes :

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chain bonds :

7-11 11-12

ring bonds :

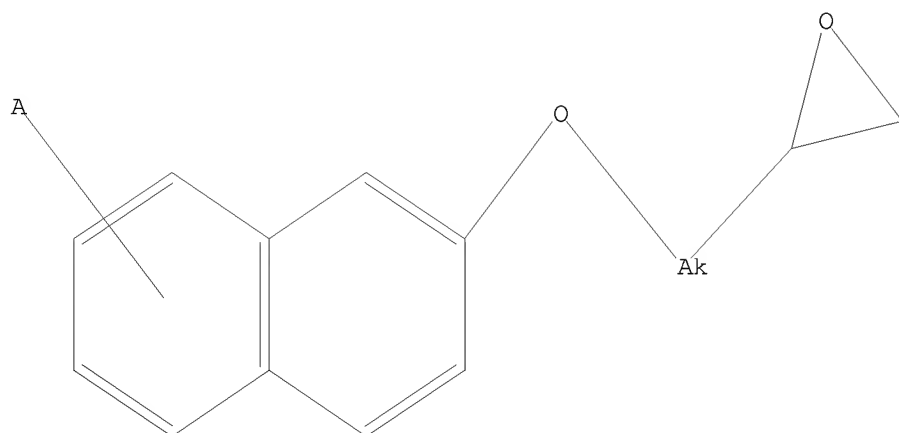
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20-21 21-22

exact bonds :

7-11 11-12

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20



Structure attributes must be viewed using STN Express query preparation.
 L31 QUE ABB=ON PLU=ON L30 AND L29

=> d his

(FILE 'HOME' ENTERED AT 10:59:25 ON 12 FEB 2010)

FILE 'REGISTRY' ENTERED AT 10:59:40 ON 12 FEB 2010

L1

SCREEN 1841

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L26          QUE L25 AND L24
L27          491 S L26 FULL SUB=L17

          FILE 'CAPLUS' ENTERED AT 11:05:23 ON 12 FEB 2010
L28          544 S L27

          FILE 'REGISTRY' ENTERED AT 11:06:47 ON 12 FEB 2010
L29          SCREEN 1841
L30          STRUCTURE UPLOADED
L31          QUE L30 AND L29

=> s 131 subset=127 full
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FULL SUBSET SCREEN SEARCH COMPLETED -      488 TO ITERATE

100.0% PROCESSED      488 ITERATIONS      481 ANSWERS
SEARCH TIME: 00.00.01

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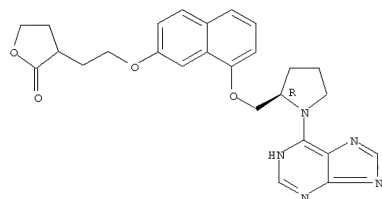
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L33          10 L27 NOT L32

=> d 133 1-10

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L33 ANSWER 1 OF 10 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 1204426-69-6 REGISTRY
 ED Entered STN: 02 Feb 2010
 CN 2(3H)-Furanone, dihydro-3-[2-[[8-[[[(2R)-1-(9H-purin-6-yl)-2-pyrrolidinyl]methoxy]-2-naphthalenyl]oxy]ethyl]- (CA INDEX NAME)
 FS STEREOSEARCH
 MF C26 H27 N5 O4
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 LC STN Files: CA, CAPLUS, TOXCENTER

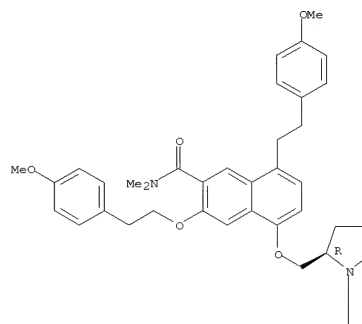
Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)
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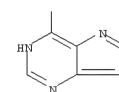
L33 ANSWER 2 OF 10 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 1204426-35-6 REGISTRY
 ED Entered STN: 02 Feb 2010
 CN 2-Naphthalenecarboxamide, 3-[2-(4-methoxyphenyl)ethoxy]-8-[2-(4-methoxyphenyl)ethyl]-N,N-dimethyl-5-[[[(2R)-1-(9H-purin-6-yl)-2-pyrrolidinyl]methoxy]- (CA INDEX NAME)
 FS STEREOSEARCH
 MF C41 H44 N6 O5
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



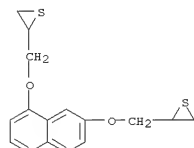
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PAGE 2-A



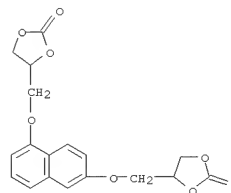
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 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L33 ANSWER 3 OF 10 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 1202905-80-3 REGISTRY
 ED Entered STN: 22 Jan 2010
 CN INDEX NAME NOT YET ASSIGNED
 MF C16 H16 O2 S2
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 LC STN Files: CA, CAPLUS, TOXCENTER



1 REFERENCES IN FILE CA (1907 TO DATE)
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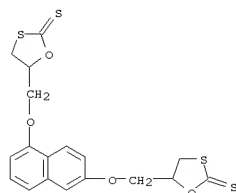
L33 ANSWER 4 OF 10 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 1078096-27-1 REGISTRY
 ED Entered STN: 01 Dec 2008
 CN 1,3-Dioxolan-2-one, 4,4'-[1,6-naphthalenediylbis(oxymethylene)]bis- (CA INDEX NAME)
 MF C18 H16 O8
 SR CA
 LC STN Files: CA, CAPLUS



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2 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

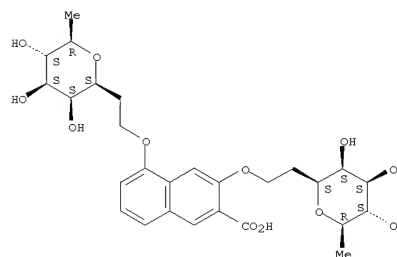
L33 ANSWER 5 OF 10 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 874739-73-8 REGISTRY
 ED Entered STN: 20 Feb 2006
 CN 1,3-Oxathiolane-2-thione, 5,5'-[1,6-naphthalenediylbis(oxymethylene)]bis-
 (9CI) (CA INDEX NAME)
 MF C18 H16 O4 S4
 SR CA
 LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT
 1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L33 ANSWER 6 OF 10 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 216098-60-1 REGISTRY
 ED Entered STN: 24 Dec 1998
 CN D-glycero-D-galacto-Octitol,
 1,1'-O-(6-carboxy-1,7-naphthalenediyl)bis[3,7-
 anhydro-2,8-dideoxy- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C27 H36 O12
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

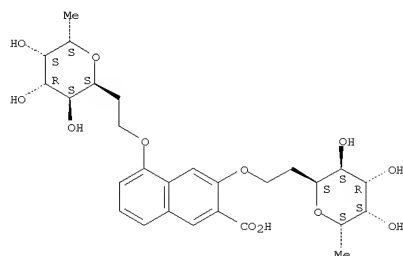
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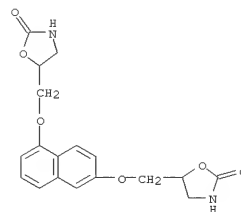
L33 ANSWER 7 OF 10 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 194992-25-1 REGISTRY
 ED Entered STN: 07 Oct 1997
 CN L-glycero-D-galacto-Octitol,
 8,8'-O-(6-carboxy-1,7-naphthalenediyl)bis[2,6-
 anhydro-1,7-dideoxy- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C27 H36 O12
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 LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



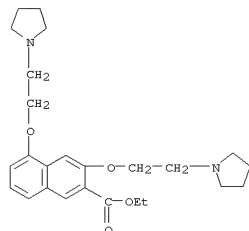
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 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L33 ANSWER 8 OF 10 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 153577-45-8 REGISTRY
 ED Entered STN: 11 Mar 1994
 CN 2-Oxazolidinone, 5,5'-[1,6-naphthalenediylbis(oxymethylene)]bis- (9CI)
 (CA INDEX NAME)
 MF C18 H18 N2 O6
 SR CA
 LC STN Files: CA, CAPLUS, CASREACT



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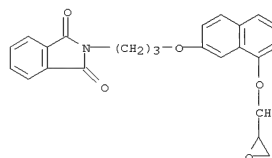
L33 ANSWER 9 OF 10 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 125001-69-6 REGISTRY
 ED Entered STN: 26 Jan 1990
 CN 2-Naphthalenecarboxylic acid, 3,5-bis[2-(1-pyrrolidinyl)ethoxy]-, ethyl ester, hydrochloride (1:1) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 2-Naphthalenecarboxylic acid, 3,5-bis[2-(1-pyrrolidinyl)ethoxy]-, ethyl ester, monohydrochloride (9CI)
 MF C25 H34 N2 O4 . Cl H
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL
 CRN (781579-50-8)



● HCl

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L33 ANSWER 10 OF 10 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 85926-63-2 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN 1H-Isolindole-1,3(2H)-dione, 2-[3-[[8-(2-oxiranylmethoxy)-2-naphthalenyl]oxy]propyl]- (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1H-Isolindole-1,3(2H)-dione, 2-[3-[[8-(oxiranylmethoxy)-2-naphthalenyl]oxy]propyl]- (9CI)
 MF C24 H21 N O5
 LC STN Files: BEILSTEIN*, CA, CAPLUS
 (*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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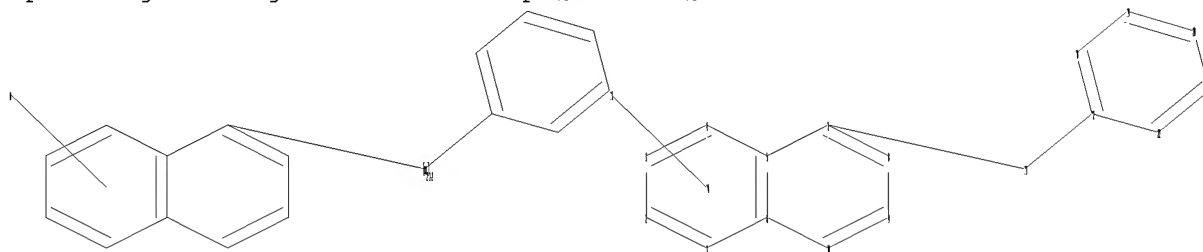
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=> screen 1841

L34 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\QUERIES\105537312.str



chain nodes :

11 13

ring nodes :

1 2 3 4 5 6 7 8 9 10 12 18 19 20 21 22

chain bonds :

7-11 11-12

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20
20-21 21-22

exact bonds :

7-11 11-12

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20
20-21 21-22

isolated ring systems :

containing 1 :

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 18:CLASS 19:CLASS 20:CLASS
21:CLASS 22:CLASS

L35 STRUCTURE UPLOADED

=> que L35 AND L34

L36 QUE L35 AND L34

=> s 136

SAMPLE SEARCH INITIATED 11:12:28 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 70770 TO ITERATE

2.8% PROCESSED 2000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

2 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1399538 TO 1431262
PROJECTED ANSWERS: 911 TO 1919

L37 2 SEA SSS SAM L35 AND L34

=> s 136 full

FULL SEARCH INITIATED 11:12:33 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1415786 TO ITERATE

97.0% PROCESSED 1373311 ITERATIONS

3849 ANSWERS

100.0% PROCESSED 1415786 ITERATIONS

3850 ANSWERS

SEARCH TIME: 00.00.26

L38 3850 SEA SSS FUL L35 AND L34

=>Testing the current file.... screen

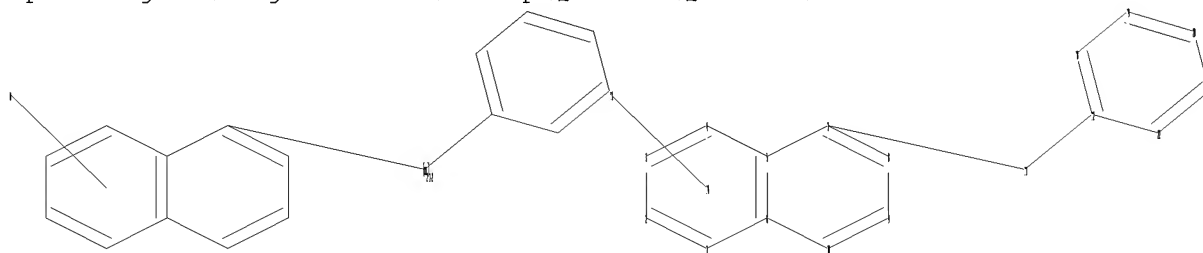
ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L39 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\QUERIES\105537312.str



chain nodes :

11 13

ring nodes :

1 2 3 4 5 6 7 8 9 10 12 18 19 20 21 22

```
chain bonds :
7-11 11-12
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20
20-21 21-22
exact bonds :
7-11 11-12
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20
20-21 21-22
isolated ring systems :
containing 1 :
```

```
Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 18:CLASS 19:CLASS 20:CLASS
21:CLASS 22:CLASS
```

```
L40      STRUCTURE UPLOADED
```

```
=> que L40 AND L39
```

```
L41  QUE L40 AND L39
```

```
=> s 141 subset=l38 full
```

```
FULL SUBSET SEARCH INITIATED 11:13:50 FILE 'REGISTRY'
```

```
FULL SUBSET SCREEN SEARCH COMPLETED -      3850 TO ITERATE
```

```
100.0% PROCESSED      3850 ITERATIONS
```

```
1464 ANSWERS
```

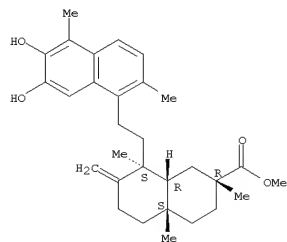
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SEARCH TIME: 00.00.01
```

```
L42      1464 SEA SUB=L38 SSS FUL L40 AND L39
```

```
=> d 142 1464
```

L42 ANSWER 1464 OF 1464 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 1259-19-4 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN 2-Naphthalenecarboxylic acid, 8-[2-(6,7-dihydroxy-2,5-dimethyl-1-naphthalenyl)ethyl]decahydro-2,4a,8-trimethyl-7-methylene-, methyl ester, (2R,4aS,8S,8aR)- (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 2-Naphthalenecarboxylic acid, 8-[2-(6,7-dihydroxy-2,5-dimethyl-1-naphthalenyl)ethyl]decahydro-2,4a,8-trimethyl-7-methylene-, methyl ester, [2R-(2 α ,4 $\alpha\beta$,8 β ,8a β)]-
 CN 2-Naphthoic acid, 8-[2-(6,7-dihydroxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-2,4a,8-trimethyl-7-methylene-, methyl ester, stereoisomer (8CI)
 CN Isopristimerin I (7CI)
 FS STEREOSEARCH
 MF C30 H40 O4
 LC STN Files: BEILSTEIN*, CA, CAPLUS
 (*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> fil caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	311.03	1347.52
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)		
CA SUBSCRIBER PRICE	0.00	-51.00

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FILE LAST UPDATED: 11 Feb 2010 (20100211/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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(FILE 'HOME' ENTERED AT 10:59:25 ON 12 FEB 2010)

FILE 'REGISTRY' ENTERED AT 10:59:40 ON 12 FEB 2010

L1	SCREEN 1841
L2	STRUCTURE UPLOADED
L3	QUE L2 AND L1
L4	7 S L3
L5	3300 S L3 FULL
L6	SCREEN 1841
L7	STRUCTURE UPLOADED
L8	QUE L7 AND L6
L9	792 S L8 FULL SUB=L5
L10	2508 S L5 NOT L9
L11	SCREEN 1841
L12	STRUCTURE UPLOADED

L13 QUE L12 AND L11
L14 2018 S L13 FULL SUB=L5
L15 1282 S L5 NOT L14
L16 1078 S L15 AND L10
L17 983 S L16 AND CAPLUS/LC
L18 95 S L16 NOT L17

FILE 'CAPLUS' ENTERED AT 11:02:53 ON 12 FEB 2010
L19 714 S L17

FILE 'REGISTRY' ENTERED AT 11:03:41 ON 12 FEB 2010
L20 SCREEN 1841
L21 STRUCTURE UPLOADED
L22 QUE L21 AND L20
L23 0 S L22 FULL SUB=L17
L24 SCREEN 1841
L25 STRUCTURE UPLOADED
L26 QUE L25 AND L24
L27 491 S L26 FULL SUB=L17

FILE 'CAPLUS' ENTERED AT 11:05:23 ON 12 FEB 2010
L28 544 S L27

FILE 'REGISTRY' ENTERED AT 11:06:47 ON 12 FEB 2010
L29 SCREEN 1841
L30 STRUCTURE UPLOADED
L31 QUE L30 AND L29
L32 481 S L31 FULL SUB=L27
L33 10 S L27 NOT L32
L34 SCREEN 1841
L35 STRUCTURE UPLOADED
L36 QUE L35 AND L34
L37 2 S L36
L38 3850 S L36 FULL
L39 SCREEN 1841
L40 STRUCTURE UPLOADED
L41 QUE L40 AND L39
L42 1464 S L41 FULL SUB=L38

FILE 'CAPLUS' ENTERED AT 11:14:13 ON 12 FEB 2010

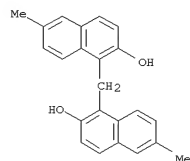
=> s 142

L43 626 L42

=> d ibib abs hitstr 600-626

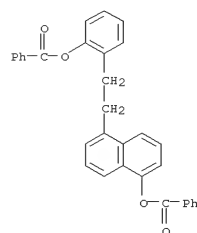
L43 ANSWER 600 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1946:19282 CAPLUS
DOCUMENT NUMBER: 40:19282
ORIGINAL REFERENCE NO.: 40:3755f-4,3756a-g
TITLE: Synthesis of polycyclic compounds from
6-methyl-2-naphthol
AUTHOR(S): Royer, Rene; Buu-Hoi
SOURCE: Compt. rend. (1946), 222, 558-60
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB 6-Methyl-2-naphthol (I) constitutes a convenient starting material for
the synthesis of polycyclic compds. having Me groups at various points in the
mol. I, treated with PhNHNH2 and its HCl salt (cf. J. Chemical Society
83, 272 (1903)) gives 2'-methyl-3,4-benzocarbazole (II), colorless needles
from alc., m. 196°; picrate, red prisms, m. 176° (decomposition).
Condensed with CH2O, I gives 1,1'-methylenebis(6-methyl-2-naphthol)
(III), colorless plates from alc., m. 201°. III, treated with POCl3 (cf.
Wolff, Ber. 26, 84 (1893)) gives 2',3'-dimethyl-3,4,5,6-dibenzoxanthene
(IV), colorless needles, m. 239° (decomposition); picrate, orange
needles, m. 180° (decompn) (cf. C.A. 33, 4990.5). Oxidation of I
with FeCl3 yields 6,6'-dimethyl-2,2'-dihydroxy-1,1'-binaphthyl (V),
colorless powder from alc., m. 170°, which upon dehydrogenation
with Zn dust gives 3'',2'-dimethyl-3,4,5,6-dibenzodiphenylene oxide (VI),
colorless needles from alc., m. 156°. V, treated with Zn and POCl3
followed by pyrolysis (cf. Marschalk, C.A. 23, 1897), leads to
5,8-dimethylperylene (VII), orange needles from C6H6, m. 163°;
picrate, black needles, m. 217°. VII is oxidized by CrO3 to
5,8-dimethyl-4,9-perylenequinone, orange needles from PhNO2, m. above
360°. I and 1-ClOH7NH2 in the presence of iodine give
N-(6-methyl-2-naphthyl)-1-naphthylamine, a yellow resin which is
converted with AsCl3 to
3'-methyl-10-chloro-9,10-dihydro-1,2,5,6-dibenzophenarsazine
(VIII), yellow needles from o-C6H4Cl2, m. 283°. VIII and RMgX (cf.
Rev. Sci. 82, 453 (1944)) give (from Et2O) the following 10-R derivs. of
3'-methyl-9,10-dihydro-1,2,5,6-dibenzophenarsazine. Me, yellowish
prisms, m. 171°; Et, m. 158°; Ph, m. 180°. I and 2-ClOH7NH2
give 6-methyl-di-2-naphthylamine, colorless needles from alc., m.
145°, which, with AsCl3, gives
3'-methyl-10-chloro-9,10-dihydro-3,4,5,6-dibenzophenarsazine (IX), orange
needles from o-C6H4Cl2, m. 292°. IX and RMgX as above, give the
10-Me, m. 200°, 10-Et, m. 115°, and 10-Ph, m. 203°,
derivs. of 3'-methyl-9,10-dihydro-3,4,5,6-dibenzophenarsazine.
IT 112204-07-6P, 2-Naphthol, 1,1'-methylenebis[6-methyl-
Nl: PREP (Preparation)
RN 112204-07-6 CAPLUS
CN 2-Naphthalenol, 1,1'-methylenebis[6-methyl- (CA INDEX NAME)]

L43 ANSWER 600 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L43 ANSWER 601 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1946:5250 CAPLUS
DOCUMENT NUMBER: 40:5250
ORIGINAL REFERENCE NO.: 40:993d-1,894a-g
TITLE: Steroids and sex hormones. CXIV. Preparation of
4,13-dihydroxychrysene derivatives
AUTHOR(S): Hardegger, E.; Redlich, D.; Gal, A.
CORPORATE SOURCE: Tech. Hochschule, Zurich
SOURCE: Helvetica Chimica Acta (1945), 28, 628-37
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 40:5250
GI For diagram(s), see printed CA Issue.
AB While the estrogenically active 1,2,10,11-tetrahydro-5,14-
dihydroxychrysene has its functional groups at C atoms 5 and 14,
D-homodihydrotestosterone has them at C atoms 4 and 14. It seemed,
therefore, to be interesting to study the biol. properties of a compound
of this type with its OH groups at C atoms 4 and 13. o-Br-C6H4OMe (I), b.
96-7°, prepared in 80% yield from o-H2NC6H4OMe, is converted via its
Mg compound with CH2.CH2.O into 60% 2-o-anisylethyl alc. (II), bl2
136° (phenylcarbamate, m. 80-1°; allophanate, m. 176-7°; p-toluenesulfonate (III), 70% yield, m. 56-7°). II
and SOCl2 give 85% 2-o-anisylethyl chloride (IV), bl2 108-12°. When NaCH(CO2Et)2 from 40.26 g. ester is heated with 76 g. III or 50 g.
2-o-anisylethyl bromide for 20 h. at 100°, saponification of the reaction
product and decarboxylation give 65% or 80%, resp., of
γ-o-anisylbutyric acid (V). With IV the yield of V is 55%.
(Benzylthiuronium salt of V m. 136-8°; Me ester, b. 120-40°
(air bath, high vacuum); acid chloride, prepared with SOCl2, bl2
144-5°). Cyclization of V with POCl3 in CH2Cl2 gives
1-keto-5-methoxytetralin (VI), b0.05 102-4°, bl2 160-4°
(oxime, m. 157-9°). VI is also prepared by hydrogenation of
1,5-dihydroxynaphthalene, m. 257-8°, in EtOH in the presence of
Ni-kieselguhr at 120° and 76 atmospheric for 7 h. to
1,5-dihydroxytetralin, m. 131-3° (with Raney Ni the yield is
lower), partial methylation of the mono-Na salt of the latter with MeI to
give 1-hydroxy-5-methoxytetralin (VII), m. 72-3.5°, and oxidation of
VII with Cr2O3 in AcOH to VI, m. 82-3°. Condensation of 11.8 g. VI
with a Grignard reagent prepared from 17.4 g. IV and 2.44 g. Mg gives 19
g.
1-(o-anisyl)-2-(3,4-dihydro-5-methoxy-1-naphthyl)ethane (VIII), m.
64-5.5°, which when demethylated with C5H5N.HCl according to Prey
(C.A. 36, 4809.7) gives 1-(o-hydroxyphenyl)-2-(3,4-dihydro-5-hydroxy-1-
naphthyl)ethane, m. 97-9° [bis-(p-nitrobenzoate), m.
162-4°]. Hydrogenation of VIII in EtOH in the presence of Pd-CaCO3
for 4 h. gives 1-(o-anisyl)-2-(1,2,3,4-tetrahydro-5-methoxy-1-
naphthyl)ethane (IX), b0.2 130-60° (air bath temperature). Demethylation
of IX with C5H5N.HCl gives 1-(o-hydroxyphenyl)-2-(1,2,3,4-tetrahydro-5-
hydroxy-1-naphthyl)ethane, m. 102-3° [bis-(p-nitrobenzoate), m.
117-19°]. When 2 g. VIII is shaken with 14 g. AlCl3 in CS2 for 90
h., partial disproportionation takes place. After removal of 90 mg.
phenolic products with 2 N NaOH, the neutral products, extracted with
petr.
ether, after repeated chromatog. fractionation give 15 mg.
1,2,9,10,11,18-hexahydro-4,13-dimethoxychrysene, crystals from EtOH, m.
186-8°. From the residual petr.-ether eluates, 0.27 g.
1-(o-anisyl)-2-(5-methoxy-1-naphthyl)ethane (X), m. 55-6° (picrate
(XI), m. 143-5°), is isolated. Filtration of XI in C6H6-petr.

L43 ANSWER 601 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
ether through Al2O3 regenerates X. From the mother liquor of XI, on
chromatog. fractionation, 45 mg. IX is isolated. Demethylation of 320
mg.
X with C5H5N.HCl gives 300 mg. 1-(o-hydroxyphenyl)-2-(5-hydroxy-1-
naphthyl)ethane (XII), m. 155-6° (di-Bz deriv., m. 141°).
Cyclization of 8 g. VIII by treating it with 400 cc. AcOH-H2SO4 (10:1)
for
1 h. at 100° gives 2.4 g. X, isolated as the picrate, and 3 g. IX.
Oxidn. of 35 g. VIII in 600 cc. CHCl3 by addn. of 267 cc. 0.9 N BrO2H at
-15° over a period of 1 h., keeping the mixt. for 2 h. at
-10° and 3 h. at 0°, addn. of 40 cc. 0.1 N Na2S2O3, and
washing the CHCl3 soln. with 4 l. 2 N Na2CO3 and 2 l. 2 N NaOH at
0° in several portions, give after evapn. 38 g. oxidn. product.
This is dissolved in 1 l. C6H6-petr. ether and chromatog. fractionated
over 600 g. Al2O3, giving 3 oxides of the compn. C20H22O3. Oxide A,
probably XIII, 5.5 g., b. 215° (high vacuum); oxide B, probably
XIV, 2.7 g. crystd. from AcOEt-petr. ether, m. 87°; oxide C,
probably XV, m. 95-6°. They do not give semicarbazones.
Cyclization of XIII by heating it for 36 h. with 20% HBr gives 20 mg.
acid, 530 mg. phenolic (XVI), and 490 mg. neutral products. Chromatog.
fractionation of XVI gives 2 cryst. compds., C19H18O3 (XVII), m.
166°, and C18H16O3 (XVIII), m. 215°. Demethylation of XVII
with C5H5N.HCl gives XVIII. On cyclization of XIV and XV, XII, m.
158°, is the only cryst. product isolated. Cyclization of 7.9 g.
XIII by heating it with 150 cc. AcOH and 150 cc. 80% H2SO4 for 1 h. gives
7.1 g. neutral product from which, after repeated chromatog.
fractionation
and recyclization, 220 mg. 1,2,10,11-tetrahydro-4,13-dimethoxychrysene
(XIX), shiny leaflets, m. 218°, is isolated. XIX, when heated for
3 h. with C5H5N.HCl at 230-40°, or with MeMgI at 180°, gives
1,2,10,11-tetrahydro-4,13-dihydroxychrysene, m. 275°, in good
yield.
IT 861050-80-8P, 1-Naphthol, 5-(o-hydroxyphenethyl)-, dibenzoate
Rl: PREP (Preparation)
(preparation of)
RN 861050-80-8 CAPLUS
CN 1-Naphthalenol, 5-[2-[2-(benzoyloxy)phenyl]ethyl]-, 1-benzoate (CA INDEX
NAME)

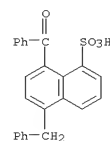


262-3°; 2-naphthol-6-, m. 264°; 5-nitro-1-naphthalene, decomp. 265°; 2-naphthalene, m. 269°; 5-nitro-o-toluene, m. 269-71° (decompn.); 1,8-AcNHClO₆H₆, m. 273°; 3,4,5-I(HO)(HO₂C)C₆H₂, decomp. 273-48°; 1-anthraquinone, m. 284°; 1,6-naphthalenedi, m. 298-9° (decompn.); 1,8-dihydroxy-3,6-naphthalenedi, m. 300° (decompn.); 2-anthraquinone, m. 309°; 1-naphthylamine-3,6,8-tri, m. 312° (decompn.); 1-amino-8-naphthol-3,6-di, decomp. 340°; 1,5-AcNHClO₆H₆, m. 344° (decompn.); 2-naphthol-6,8-di, m. > 300°; 4,4'-biphenylidi, m. > 330° (decompn.); 2,6-naphthalenedi, m. > 345°; 2-chloro-5-nitrobenzene, decomp. > 200°; 2,5-Br(HO₂C)C₆H₃ (mono salt), decomp. > 200°; 1,5-naphthalenedi, decomp. The o-MeC₆H₄NH₂ salts of the following sulfonic acids are prep.: o-HO₂CC₆H₄, m. 127.5°; p-ClC₆H₄, m. 162.5-4°; 3,4-Cl₂C₆H₃, m. 170-2°; 4-chloro-m-toluene, m. 173.5-5°; Ph, m. 176°; 4-bromo-m-toluene, m. 178-80°; p-BrC₆H₄, m. 182-3.5°; p-MeC₆H₄, m. 190°; 4-iodo-m-toluene, m. 190.5-1.5°; p-HOC₆H₄, m. 192°; p-EtC₆H₄, m. 192-3°; m-O₂NC₆H₄, m. 193°; p-(PhCH:CHCH:NNH)C₆H₄ (monohydrate), m. 196°; 1,8-AcNHClO₆H₆, m. 198°; 3-nitro-4-bromobenzene, m. 199-200°; 3-nitro-p-toluene, m. 202°; p-phenoxybenzene, m. 205.5-7°; 2-naphthol-6-, m. 208°; p-(PhCH:NNH)C₆H₄, m. 213° (decompn.); 2-naphthalene, m. 213°; diisopropyl-1-naphthalene, m. 214°; p-(2-HOC₆H₃CH:NNH)C₆H₄, m. 219°; p-(4-nitrophenoxy)benzene, m. 226-8°; p-(PhCH:CHCH:NNH)C₆H₄, m. 230° (decompn.); o-HO₂CCH:CHC₆H₄ (mono salt), m. 234-5°; 4-chloro-5-nitro-m-toluene, m. 235-7° (decompn.); 1-naphthalene, m. 237°; 2,7-naphthalenedi, m. 238°; 2-naphthol-8-, m. 242°; 2,4-(O₂N)₂C₆H₃, m. 245-6.5° (decompn.); 2,5-Cl₂C₆H₃, m. 250-1°; p-tert-BuC₆H₄, m. 253-4°; 2-naphthol-3,6-di, m. 257°; 5-nitro-o-toluene, m. 256-8° (decompn.); 1,5-AcNHClO₆H₆, m. 259°; 4,1-AcNHClO₆H₆, m. 260-1°; 2,6-AcNHClO₆H₆, m. 262°; 2-naphthol-6,8-di, m. 270-1°; 1,8-dihydroxy-3,6-naphthalenedi, m. 290° (decompn.); 1-naphthol-4-, m. 303-4°; 1-naphthylamine-3,6,8-tri, m. 304° (decompn.); 1-amino-8-naphthol-3,6-di, decomp. 320°; 1,6-naphthalenedi, m. 223-4° (decompn.); 2,6-naphthalenedi, m. 338° (decompn.); 1,5-naphthalenedi, m. 338-9° (decompn.); 4,4'-biphenylidi (monohydrate), m. 330° (decompn.). The p-MeC₆H₄NH₂ salts of the following sulfonic acids are prep.: 4-hexyl-1-phenol-2-, m. 139-40°; 4-propyl-1-phenol-2-, m. 141-3°; 4-amy-1-phenol-2-, m. 147-9°; 4-butyl-1-phenol-2-, m. 149-50°; 1-naphthalene, m. 181°; 3,4-dihydroxy-1-phenanthrene, decomp. 182°; 2,4-dimethoxybenzene, m. 191-2°; 1-naphthol-4-, m. 196°; o-HO₂CC₆H₄, m. 197°; p-MeC₆H₄, m. 198°; m-ClC₆H₄, m. 199-200°; p-HOC₆H₄, m. 202°; o-MeC₆H₄, m. 203-4°; 2-methyl-4-methoxybenzene, m. 204-5°; 3,4-Cl₂C₆H₃ (monohydrate), m. 204-6°; Ph, m. 205°; 1,8-AcNHClO₆H₆, m. 207°; p-EtC₆H₄, m. 208-9°; p-ClC₆H₄, m. 208-10°; 3-nitro-p-toluene, m. 214-15°; p-BrC₆H₄, m. 215-16.5°; 4-chloro-m-toluene, m. 218-20°; 2-naphthalene, m. 221°; 4-iodo-m-toluene, m. 220-2°; m-O₂NC₆H₄, m. 222°; 3-phenanthrene, m. 222°; 4-bromo-m-toluene, m. 222-3°; p-phenoxybenzene, m. 222-3.5°; p-(PhCH:CHCH:NNH)C₆H₄, m. 223°; p-(PhCH:NNH)C₆H₄, m. 226°; p-(2-HOC₆H₃CH:NNH)C₆H₄, m. 226°; o-HO₂CCH:CHC₆H₄ (mono salt) (monohydrate), m. 225-7°; m-HO₂CCH:CHC₆H₄ (mono salt), m. 229-30°;

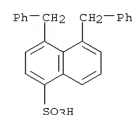
ACCESSION NUMBER: 1943:8395 CAPLUS
DOCUMENT NUMBER: 37:8395
ORIGINAL REFERENCE NO.: 37:13994,1400a-i,1401a-g
TITLE: Arylamine salts as derivatives for identifying aromatic sulfonic acids
AUTHOR(S): Dermer, O. C.; Dermer, V. H.
SOURCE: Journal of Organic Chemistry (1942), 7, 581-6
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB The PhNH₂, o- and p-MeC₆H₄NH₂ salts are used for the identification of aromatic sulfonic acids. They are prepared according to the method of Fieser
(C. A. 23, 4468) by heating the alkali sulfonate with a slight excess of the amine and HCl in H₂O. The solution is treated with charcoal, filtered, chilled and the salts are recrystd. to constant m. p. The PhNH₂ salts of the following sulfonic acids are prepared: o-ureidobenzene, m. 159-61° (decomposition); o-HO₂CC₆H₄, m. 165°; p-HOC₆H₄, m. 170°; 6-ureido-m-toluene (SO₃H group is numbered 1), m. 170-1°; 1-ClOH₇, m. 183°; 5-bromo-2-ureidobenzene, m. 183-5°; 1-naphthol-4-, m. 186-7°; 5-chloro-2-ureidobenzene, m. 187°; 4-isopropyl-1-naphthalene, m. 190° (decomposition); 2-amino-5-iodobenzene, m. 191.5°; p-HO₂CCHBr:CHBrC₆H₄, m. 192°; 1-nitro-2-naphthalene, m. 201.9°; diphenylamine-4-, m. 206.5°; m-ClC₆H₄, m. 206-7°; 2-nitro-4-chlorobenzene, m. 207°; o-HO₂CCH:CHC₆H₄ (mono salt), m. 208-9°; 2-isopropyl-1-naphthalene, m. 209-10° (decomposition); 2-amino-5-chlorobenzene, m. 210°; o-H₂NC₆H₄, m. 180-210° (decomposition); 5-methyl-2-naphthalene, m. 209-11°; 5-Br-2-(H₂NCONHCONH)C₆H₃, decomp. 212°; 5-1-2-(H₂NCONHCONH)C₆H₃, m. 212-13°; 2-amino-5-bromobenzene, m. 214°; p-(MePhC:NNH)C₆H₄, m. 215°; p-(PhCH:CHCH:NNH)C₆H₄, m. 215-20°; o-MeC₆H₄, m. 218°; p-(PhCH:NNH)C₆H₄, m. 221°; p-[(p-MeOC₆H₄)CH:NNH]C₆H₄, m. 221°; 1-benzyl-4-benzoyl-5-naphthalene, m. 221-2°; m-O₂NC₆H₄, m. 222°; p-ClC₆H₄, m. 222-3°; p-phenetole, m. 224° (decomposition); m-HO₂CC₆H₄ (mono salt), m. 224-6°; 8-nitro-1-naphthalene, decomp. 226-9°; 3-nitro-p-toluene, m. 229°; 4-chloro-m-toluene, m. 229-30.5°; 4,1-AcNHClO₆H₆, m. 231-2°; 1-benzoyl-5-naphthalene, m. 235°; 4-bromo-m-toluene, m. 234-6°; 2-amino-5-nitrobenzene, decomp. 236-7°; p-BrC₆H₄, m. 237-8°; p-MeC₆H₄, m. 238°; m-HO₂CCH:CHC₆H₄ (mono salt), m. 238° (decomposition); 4-iodo-m-toluene, m. 237-9°; diphenylamine-4,4'-di, m. 239°; 2-naphthol-8-, m. 240°; Ph, m. 240°; 6-amino-m-toluene, m. 237-41° (decomposition); 2-naphthol-3-, m. 241-2°; 4-chloro-5-nitro-m-toluene, m. 246-8° (decomposition); 6-ureido-m-toluene, m. 247-9°; p-(2-HOC₆H₃CH:NNH)C₆H₄, m. 249°; 8-methyl-2-naphthalene, m. 248-50°; p-tert-BuC₆H₄, m. 249-50°; m-H₂NCOOC₆H₄, m. 250°; p-EtC₆H₄, m. 250-1°; 2,7-naphthalenedi, m. 251-2°; 1,8-dibenzyl-4-naphthalene, m. 252-3°; 2-naphthol-3,6-di, m. 254°; 3,4-Cl₂C₆H₃ (monohydrate), m. 254-5°; 2,6-AcNHClO₆H₆, m. 256°; 5-bromoacenaphthene-β-, m. 256-7°; p-phenoxybenzene, m. 256-8°; 3-nitro-4-bromobenzene, m. 256-9°; 4-(p-nitrophenoxy)benzene, decomp. 255-60°; 5-nitro-2-naphthalene, decomp. 260°; 5-bromoacenaphthene-α-, m. 260-1°; 2,4-(NO₂)₂C₆H₃, m. 259-62° (decomposition); 2,5-Cl₂C₆H₃, m.

2-naphthol-8-, m. 232°; 4,1-AcNHClO₆H₆, m. 232-3°; 6-retene, m. 233-4°; 4-phenanthrene, m. 235°; 2-nitro-4-bromobenzene, m. 235-6° (decompn.); 4-chloro-5-nitro-m-toluene, m. 238-40° (decompn.); 2,6-AcNHClO₆H₆, m. 243°; 2,4-(O₂N)₂C₆H₃, m. 245-7°; p-(4-bromophenoxy)benzene, m. 245-7°; 2,5-Cl₂C₆H₃, m. 247-8°; 2-naphthol-6-, m. 248°; p-phenylazobenzene, m. 247-9° (decompn.); 4,7-dimethyl-5-hydrindene, m. 248-9° (decompn.); 2-naphthol-3,6-di, m. 250°; 3,5-dinitro-p-toluene, m. 251°; p-tert-BuC₆H₄, m. 254-5°; 1,5-AcNHClO₆H₆, m. 255°; 5-nitro-o-toluene, m. 256-7° (decompn.); p-(p-HO₂CC₆H₄O)C₆H₄, m. 266-7°; 1-phenanthrene, m. 267°; toluene-2,4-di, m. 277° (decompn.); p-(p-HO₂CC₆H₄)C₆H₄, m. 288-9°; 2-phenanthrene, m. 291°; 1-naphthylamine-3,6,8-tri, m. 292° (decompn.); 2-naphthol-6,8-di, m. 294°; 2,7-naphthalenedi, m. 299°; 1,8-dihydroxy-3,6-naphthalenedi, m. 308° (decompn.); 2-anthraquinone, m. 308°; 1,6-naphthalenedi, m. 314-15° (decompn.); 6-nitroacridone-2- (C. A. numbering), m. 318-20° (decompn.); 1,5-naphthalenedi, m. 332° (decompn.); 1-amino-8-naphthol-3,6-di, decomp. 335°; p-H₂NC₆H₄, m. > 300°; 4,4'-biphenylidi, m. > 330° (decompn.); 2,6-naphthalenedi, m. > 360°; 1,2-phenanthraquinone-4-, decomp. 859071-48-0, 1-Naphthalenesulfonic acid, 8-benzoyl-5-benzyl-861091-89-6, 1-Naphthalenesulfonic acid, 4,5-dibenzyl- (identification of, and aniline salt)

IT 859071-48-0 CAPLUS
RN 1-Naphthalenesulfonic acid, 8-benzoyl-5-(phenylmethyl)- (CA INDEX NAME)



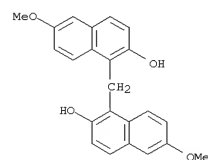
RN 861091-89-6 CAPLUS
CN 1-Naphthalenesulfonic acid, 4,5-bis(phenylmethyl)- (CA INDEX NAME)



L43 ANSWER 603 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1941:44903 CAPLUS
DOCUMENT NUMBER: 35:44903
ORIGINAL REFERENCE NO.: 35:6965e-1,6966a-b
TITLE: Synthesis of substances related to the sterols. XXX
AUTHOR(S): Robinson, Robert; Weygand, F.
SOURCE: Journal of the Chemical Society (1941) 386-91
CODEN: JCSOA9; ISSN: 0368-1769
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 35:44903
AB Details are given of the preparation of 1,2-MeC10H6OH (I) by the reduction of methylenebis-2-naphthol with Zn and cuprammonium nitrate; the yield from 100 g. 2-C10H7OH is 45-55 g., if Me2SO4 is added to the solution before the final acidification, there results 40-50 g. of 2,1-MeOC10H6Me. Catalytic reduction of 10 g. of I in AcOH with 1.5 g. PtO2, using 3-4 atmospheric of H, for 20 hrs. gives 7 g. of 1-methyl-2-decalol (II), b16 121-3°, nD19.5 1.5000; this is doubtless a mixture of stereoisomers but these are probably all derivs. of cis-decalin because reduction in AcOH is known to promote the formation of cis-2-decalols from 2-C10H7OH. Oxidation of II with K2Cr2O7 in H2SO4 yields 1-methyl-2-decalone (III), b15 117-20°, nD19 1.4898, isolated as the semi-carbazone, m. 185-91°; the 2,4-dinitrophenylhydrazone m. 144-6°. The Na derivative of III (prepared with NaNH2 in ether in a N atmospheric) and AcCH2CH2NEt2.MeI (3 hrs. at room temperature and refluxed 3 hrs.) give 2-keto-12-methyl-Δ1,11-dodecahydronaphthene (IV), isolated as the semi-carbazone, m. 225-30° (decomposition); heating IV with Se at about 340° for 16 hrs. gives phenanthrene and 2-phenanthrol. 2,6-HOC10H6OMe and HCHO with aqueous NaOH, after heating 1 hr. on the water bath, give 1,1'-methylene-bis(2-hydroxy-6-methoxynaphthalene), m. 202°. Catalytic reduction of 2,6-C10H6(OH)2 (V) in AcOH with PtO2 yields cis-β-decalol (m. 104°). 2,6-C10H6(OMe)2 (VI) suffers loss of a MeO group on hydrogenation with PtO2 and the di-Ac derivative is also deoxygenated. The preparation of 2,6,1-(HO)2C10H5CHO in 10.7-g. yield from 15 g. of tech. V is described but its reduction was not attempted after the behavior of V was known. Reduction of VI with Na in iso-AmOH gives 2,6-dimethoxydihydronaphthalene, m. 83-4°. 2,1-MeOC10H6Me and AcCl, added to AlCl3 in PhNO2 cooled in ice, and the mixture kept 48 hrs. at room temperature, give 70-80% of 6-methoxy-5-methyl-2-acetonaphthone (VII), m. 97-8° (oxime, m. 171°; 2,4-dinitrophenylhydrazone, red, m. 282-3°); HI in AcOH gives the 6-HO analog, m. 164°; the oxime on catalytic reduction yields a nonphenolic base. Oxidation of 5 g. of VII with alkaline NaOCl gives 4.1 g. of 6-methoxy-5-methyl-2-naphthoic acid, m. 266-7°; the 6-HO analog (VIII) m. 247-9°. Catalytic reduction of VIII in AcOH with PtO2 yields 1-methyldecalin-6-carboxylic acid, b12 170°, m. 127-8°. Passing HCl into a mixture of 4 g. 1,5-C10H6(OH)2 (IX), 10 g. AcCH2CO2Et and 40 cc. EtOH for 1.5 hrs. with cooling and then for a few hrs. without cooling gives 5.2 g. of 6'-hydroxy-4-methyl-7,8-benzocoumarin (X), m. 299-302° (decomposition); with AlCl3 in ether 2 g. of IX give 2.2 g. of X; p-nitrobenzoate, lemon-yellow, m. 262°; the AcOH solution is colorless. Addition of 10 cc. concentrated H2SO4 to 5 g. X, 10 g. AcCH2CO2Et and

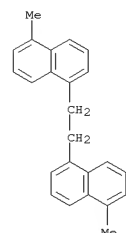
L43 ANSWER 604 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1939:26709 CAPLUS
DOCUMENT NUMBER: 33:26709
ORIGINAL REFERENCE NO.: 33:3783g-4,3784a-g
TITLE: Triterpenes. XLII. Synthesis of 1,10-dimethylpicene, 1,2,8- and 1,2,10-trimethylpicene and of 1,2,9,10-tetramethylpicene
AUTHOR(S): Ruzicka, L.; Hofmann, K.
SOURCE: Helvetica Chimica Acta (1939), 22, 126-34
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C. A. 33, 1704.9. The synthesis of 1,2,8-trimethylpicene (I) by a modification of previous procedure was repeated with the controlled procedure was used for the synthesis of 1,10-di (II), 1,2,10-tri- (III) and 1,2,9,10-tetramethylpicene (IV) for comparison with similar natural dehydrogenation products. Debye-Scherrer diagrams show a slight but definite difference between II and III, both m. 380° (mixed m. p. 370°). It follows that the dehydrogenation picenes from pentacyclic triterpenes can be definitely distinguished from homologous picenes resulting from the dehydrogenation of substances with sym. built carbon structures. A mixture of 5-methyl-1-keto-1,2,3,4-tetrahydronaphthalene (V) in 150 cc. benzene and 30 g. of activated Zn was warmed on the steam bath and treated dropwise with 75 g. BrCH2CO2Et. After heating for 2 h., decomposition with ice and dilute HCl, the reaction product was cleaved by heating for 30 min. with fragments of I at 180° and distilled in a high vacuum, yielding 31 g. of Et (5-methyl-3,4-dihydro-1-naphthyl)acetate, b0.1 122-8°, reduced by 95 g. Na in 350 cc. alc. to give 21 g. of β-(5-methyl-1,2,3,4-tetrahydro-1-naphthyl)ethanol, b0.1 107-9° (3,5-dinitrobenzoate, C20H20N2O6, m. 91-2°), converted by heating with 150 g. of 33% HBr in AcOH in a bomb-tube at 100° for 5 h. into the corresponding bromide (VI), b0.1 96-7°. A Grignard reagent containing 14.3 g. VI and 2.8 g. Mg in 140 cc. anhydrous Et2O was treated dropwise with 9.5 g. V in 100 cc. Et2O. After decomposition with ice and dilute HCl and the usual working-up, the resulting oil, b0.1 176-8°, was dehydrogenated by heating with 1.5 g. of powdered PdO2 for 3 h. at 320-30°. The cooled product was extracted with benzene, filtered, evaporated down, washed with pentane and recrystd. from iso-PrOH, giving α,β-di(5-methyl-1-naphthyl)ethane, C24H22, m. 115-7°, transformed by shaking in 10 cc. CS2 with 2.4 g. AlCl3 for 3 days, working up the reaction product and crystallizing from pyridine into II, C24H18, m. 380-1° (corrected). Similarly treatment of a Grignard reagent from 0.4 g. Mg and 2.4 g. VI in 30 cc. anhydrous Et2O with 2 g. of 5,6-dimethyl-1-keto-1,2,3,4-tetrahydronaphthalene (VII) in 10 cc. Et2O for 12 h. at room temperature, working up and distilling in a high vacuum gave 1.8 g. of viscous oil, b0.1 about 200°, which was dehydrogenated with 0.5 g. PdO2 at 320-30°. The hydrocarbon was recrystd. from iso-PrOH to give α,5,5',6'-trimethyl-1,1'-dinaphthylethane, C25H24, m. 128-9°, cyclized by shaking with AlCl3 in CS2 and crystallized from pyridine to yield III, C25H20, m. 380-1°. Analogously, a Grignard solution prepared from

L43 ANSWER 603 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
10 cc. 70% H2SO4, heating to 120° and addn. of 2 10-cc. portions of AcCH2CO2Et during 30 min. give 4,4'-dimethyl-7,8,8',7'-coumarinocoumarin, sublimes at 290-300°/0.05 mm., does not m. at 360°; this has a mol. shape and disposition of O atoms that have some resemblance to the corresponding features of the sex hormones.
IT 95201-81-3P, 2-Naphthol, 1,1'-methylenebis[6-methoxy-
RL: PREP (Preparation)
(preparation of)
RN 95201-81-3 CAPLUS
CN 2-Naphthalenol, 1,1'-methylenebis[6-methoxy- (CA INDEX NAME)

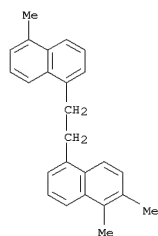


OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

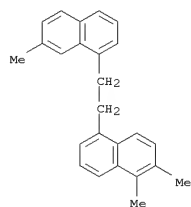
L43 ANSWER 604 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
10.4 g. of β-(7-methyl-1,2,3,4-tetrahydronaphthyl)ethyl bromide and 2 g. Mg in 130 cc. Et2O was treated with 7.2 g. of VII in 60 cc. Et2O for 12 h. at room temp. The product, b0.05 183-4°, was dehydrogenated with PdO2 and the crude hydrocarbon was purified by adsorption on Al2O3 and recrystn. from abs. alc., yielding strongly fluorescent needles of α,5,5',6'-trimethyl-1,1'-dinaphthylethane, C25H24, m. 107-10°, cyclized to give blue fluorescent platelets of I, C25H20, m. 309-10° (cor.). A mixt. of 10 g. VII in 50 cc. benzene with 10 g. of activated Zn and 25 g. BrCH2CO2Et was worked up, cleaved by heating with I and distd. in a high vacuum, yielding 10 g. of Et (5,6-dimethyl-3,4-dihydro-1-naphthyl)acetate, b0.1 105-10°, reduced by Na in abs. alc. to the alc., Cl4H20O, b0.02 128-32°, converted by heating for 5 h. at 100° in a sealed tube with 33% HBr in AcOH to the corresponding bromide (VIII), Cl4H19Br, b0.1 130-3°. The Grignard reagent from 5 g. VIII and 1 g. Mg in 60 cc. Et2O was treated with 4 g. VII in 20 cc. Et2O for 12 h. at room temp. After working up, the product was distd. in high vacuum and the distillate, b0.05 205-10°, was dehydrogenated with PdO2. The product was purified by distn. in high vacuum, adsorption on Al2O3 and recrystn. from abs. alc. yielding α,β-di(5,6-dimethyl-1-naphthyl)ethane, C26H26, m. 163-5°, cyclized by shaking with AlCl3 in CS2 to IV, C26H22, m. 400-1° (cor.) after recrystn. from pyridine.
IT 690231-10-8P, Ethane, 1,2-bis(5-methyl-1-naphthyl)-
690231-11-9P, Ethane, 1-(5,6-dimethyl-1-naphthyl)-2-(5-methyl-1-naphthyl)-
690231-16-4P, Ethane, 1-(5,6-dimethyl-1-naphthyl)-2-(7-methyl-1-naphthyl)-
690231-17-5P, Ethane, 1,2-bis(5,6-dimethyl-1-naphthyl)-
RL: PREP (Preparation)
(preparation of)
RN 690231-10-8 CAPLUS
CN Ethane, 1,2-bis(5-methyl-1-naphthyl)- (4CI) (CA INDEX NAME)



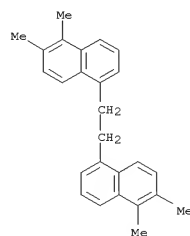
RN 690231-11-9 CAPLUS
CN Naphthalene, 1,2-dimethyl-5-[2-(5-methyl-1-naphthalenyl)ethyl]- (CA INDEX NAME)



RN 690231-16-4 CAPLUS
CN Naphthalene, 1,2-dimethyl-5-[2-(7-methyl-1-naphthalenyl)ethyl]- (CA INDEX NAME)

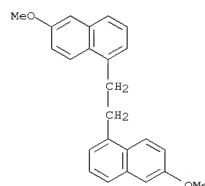


RN 690231-17-5 CAPLUS
CN Ethane, 1,2-bis(5,6-dimethyl-1-naphthyl)- (4CI) (CA INDEX NAME)



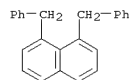
L43 ANSWER 605 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1939:6490 CAPLUS
DOCUMENT NUMBER: 33:6490
ORIGINAL REFERENCE NO.: 33:982h-1,983a-e
TITLE: Syntheses in the hydroaromatic series. III. 1.
Further
diene syntheses with
1-ethynyl-6-methoxy-3,4-dihydronaphthalene and
1-vinyl-6-methoxy-3,4-dihydronaphthalene. 2.
Condensation of cyclopentanediones with acetylene
Dane, Elisabeth; Hoss, Otto; Eder, Kurt; Schmitt, Joseph; Schon, Otto
SOURCE: Justus Liebig's Annalen der Chemie (1938), 536, 183-96
CODEN: JLABCF; ISSN: 0075-4617
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 33:6490
AB cf. C. A. 32, 122.9. 7-Hydroxyoctahydrophenanthrene-1,2-dicarboxylic acid
yields a di-Me ester, m. 174-5°. The structure of 7-methoxytetrahydrophenanthrene-1,2-dicarboxylic anhydride (I) (from 1-ethynyl-6-methoxy-3,4-dihydronaphthalene (II) and maleic anhydride (III)) follows from dehydrogenation with Pt black at 280° for 0.5 h., which yields 7-methoxyphenanthrene-1,2-dicarboxylic anhydride (Cohen, C. A. 30, 2575.9). Reaction of I with quinone (IV) in PhOMe (boiling 5 min.) gives 70% of the dihydro derivative, orange, m. 221-1.5°, which shows a violet fluorescence; the corresponding acid, ochre-yellow, m. 221° (di-Me ester, m. 138°); catalytic reduction yields I, m. 222°. Bis(6-methoxy-3,4-dihydro-1-naphthyl)acetylene and IV in PhOMe (boiling for 15 min.) give bis(6-methoxy-1-naphthyl)acetylene, m. 195°, with a blue fluorescence; catalytic reduction in dioxane gives bis(6-methoxy-1-naphthyl)ethane, m. 154°. The addition compound of I and IV (m. 160-1°) on catalytic reduction with Pd-C or Pd-CaCO₃ in PhOMe absorbs somewhat more than 2 mol of H₂; the solvent must be removed in vacuo below 50°; 10-methoxy-3,6-diketododecahydrochrysene (V) m. 130-2° (with CaCO₃) or 145-8° (with C). HBr-AcOH yields dark amorphous products. Reduction with PtO₂ in AcOH or PhOMe gives the compound C₁₈H₂₀O₂, m. 183-4° (from PhOMe) or 194° (from AcOH); it is probably V in which the 10-MeO group has been replaced by H. Further reduction of V with PtO₂ in AcOH yields 10-methoxy-3,6-dihydroxydodecahydrochrysene, m. 163°; diacetate (VI), m. 153°. Boiling VI with HBr in AcOH for 3.5 h. gives 10-methoxyoctahydrochrysene, m. 148-9°. II and CH₃tplbond.CCO₂H, refluxed 8 h. in N, give 7-methoxy-9,10-dihydrophenanthrene-2-carboxylic acid (VII), m. 206-7°, purified through the Me ester (VIII), m. 86°. The mother liquor from VIII gives a small quantity of the 1-carboxylic acid isomer of VII, m. 152-3°. VIII does not absorb H₂. Heating VII with HBr in AcOH for 6 h. gives 7-hydroxy-9,10-dihydrophenanthrene-2-carboxylic acid, m. 246°; Et ester, m. 146°; Me ester, m. 167°. VII with Se (heated 10 h. at 300°) gives 2-methyl-7-methoxyphenanthrene, m. 143-4°; HBr-AcOH gives 2-methyl-7-hydroxyphenanthrene, m. 146°. VIII and IV, heated 2 h. at 200°, give Me 7-methoxyphenanthrene-2-carboxylate, m. 134°; in PhOMe only unchanged VIII is obtained. Cyclopentanedione and CH₃tplbond.CMgBr give 1-ethynyl-1-hydroxycyclopentan-2-one (IX), b0.1 50°; NH₄OH-AgNO₃ gives a brown precipitate; (O₂N)C₆H₃NNH₂ gives no hydrazone. The 3-Me derivative of IX b0.2 65°.
IT 854219-70-8P, Ethane, 1,2-bis(6-methoxy-1-naphthyl)-

L43 ANSWER 605 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RL: PREP (Preparation)
(prepn. of)
RN 854219-70-8 CAPLUS
CN Ethane, 1,2-bis(6-methoxy-1-naphthyl)- (4CI) (CA INDEX NAME)

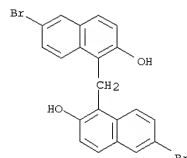


OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

L43 ANSWER 606 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1938:49924 CAPLUS
DOCUMENT NUMBER: 32:49924
ORIGINAL REFERENCE NO.: 32:6947e-f
TITLE: Infrared absorption spectra of some naphthalene hydrocarbons. Application to the analysis of the constituents of oils
AUTHOR(S): Lambert, P.; Lecomte, J.
SOURCE: Annales de l'Office National des Combustibles
Liquides
(France) (1938), 13, 111-26
CODEN: ACLIAR; ISSN: 0365-1312
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C. A. 30, 1659.9. Absorption spectra from 6 to 20 μ are given for α - and β -benzyl- and 1,4- and 1,8-dibenzyl-naphthalene, each in CS₂ solution, and for indene and isobutylindene. Comparison of these and the spectra of other C₁₀H₈ derivs. indicates that further data are required for the prediction of spectra of given compds. and the anal. of mixts.
IT 113750-62-2, Naphthalene, 1,8-dibenzyl-
(IR absorption spectra of)
RN 113750-62-2 CAPLUS
CN Naphthalene, 1,8-bis(phenylmethyl)- (CA INDEX NAME)



L43 ANSWER 607 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)

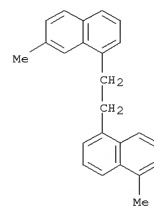
L43 ANSWER 607 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1938:11775 CAPLUS
DOCUMENT NUMBER: 32:11775
ORIGINAL REFERENCE NO.: 32:1691a-f
TITLE: Dehydrobis (2-hydroxy-1-naphthyl) methane
AUTHOR(S): Shearing, Edwin A.; Smiles, Samuel
SOURCE: Journal of the Chemical Society (1937) 1931-6
CODEN: JCSOA9; ISSN: 0368-1769
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB The structures assigned to dehydrobis(2-hydroxy-1-naphthyl)methane (I) by previous investigators have been examined and it is shown that it has the quinollic ring structure suggested by Pummerer and Cherbuliez (C. A. 9,316), the relation between it and the mono alkali derivs. of (2-HOC₁₀H₆)₂CH₂ thus being elucidated. I is recovered unchanged after boiling with AcCl, Ac₂O or Ac₂O-AcCl; AcI in Ac₂O gives (2-AcOClO₆H₆)₂CH₂, m. 213°. I and p-MeC₆H₄SO₂K in Me₂CO-H₂SO₄ give a compound, C₂₈H₂₂O₄S, m. 139-40° (decomposition); it is resolved into its constituents by 2 N alkali at 15°. With HNO₃ in Ac₂O I gives a 4(7)-NO₂ derivative, bright yellow, m. 166° (phenylhydrazone, yellow, m. 191° (decomposition)). I with MeMgI in Et₂O-C₆H₆ gives the compound C₂₂H₁₈O₂, m. 135°, also prepared by Kohn and Oserserzetter (C. A. 13, 422). Br in AcOH gives the 3,4-dibromide of I, m. 148° (decomposition); with C₅H₅N this yields the 3-Br derivative of I, orange, m. 136°; it does not yield a phenylhydrazone; Zn in hot AcOH forms 3-bromodi-2-hydroxy-1-naphthylmethane (C. A. 31, 7858.5). HCHO and 6,2-BrC₁₀H₆OH in AcOH-HCl give bis(6-bromo-2-hydroxy-1-naphthyl)methane (II), m. 242° (decomposition); di-Ac derivative, m. 287°. Oxidation with aqueous NaOCl transforms II into the dehydro derivative (III), yellow, m. 209°; phenylhydrazone, yellow, m. 200°; AcI in Ac₂O gives the Ac derivative, m. 287°. The 3-Br isomer of II m. 207°, of III, yellow, m. 232° (it does not yield a phenylhydrazone). 2-MeOC₁₀H₆CH₂C₁₀H₆OH (IV) and NaOCl in EtOH and NaOH give 1'-chloro-2'-keto-2-methoxy-1',2'-dihydrodi-1-naphthylmethane, yellow, m. 147°, turns red on exposure to light; Zn gives IV; 1'-Br derivative, yellow, m. 155°, decomposed by light and yields IV with Zn. Mono-Ac derivative (V) of (2-HOC₁₀H₆)₂CH₂, m. 195°; Br in AcOH-AcONa gives 1'-bromo-2'-keto-2-acetoxy-1',2'-dihydrodi-1-naphthylmethane, yellow, m. 127° (decomposition); it gives V with Zn; HCl in AcOH gives 6-bromobis(2-hydroxy-1-naphthyl)methane (VI). Dehydrobis(2-hydroxy-3,5,6-trimethylphenyl)methane, yellow, m. 137°. Dehydro-1-(2'-hydroxy-3',5'-dimethylbenzyl)-2-naphthol, yellow, m. 107°; phenylhydrazone, orange, m. 167°. Bis(2-hydroxy-3,5,6-trimethylphenyl)methane in 2 mols. 2 N NaOH, warmed to 90°, gives a mono-Na derivative, C₁₉H₂₃O₂Na.4H₂O, m. approx. 175°; the H₂O is removed in vacuo at 118°. VI gives a Na derivative, with 6 mols. H₂O, m. approx. 215°. The Na derivative of phenylbis(2-hydroxy-1-naphthyl)-methane seps. with 4 mols. H₂O, 2 mols. of which are lost at 35°; the dihydrate seps. from a boiling solution of the tetrahydrate in C₆H₆.
IT 68828-46-6, 2-Naphthol, 1,1'-methylenebis[6-bromo- (and derivs.)
RN 68828-46-6 CAPLUS
CN 2-Naphthalenol, 1,1'-methylenebis[6-bromo- (CA INDEX NAME)

L43 ANSWER 608 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1938:3506 CAPLUS
DOCUMENT NUMBER: 32:3506
ORIGINAL REFERENCE NO.: 32:543f-1,544a-4
TITLE: Polyterpenes and polyterpenoids. CXV. Synthesis of 1,8-dimethylpicene and 1,8-dimethyl-2-methoxypicene and their identification with the dehydrogenation products of pentacyclic triterpenes
AUTHOR(S): Ruzicka, L.; Hofmann, K.
SOURCE: Helvetica Chimica Acta (1937), 20, 1155-64
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C. A. 31, 7870.7. The homologous picene (I), m. 305-6°, obtained by the Se or Pd dehydrogenation of various triterpenes yields average analyses whose values lie between those of trimethylpicene, C₂₅H₂₀ (C, 93.70; H, 6.30%), and dimethylpicene, C₂₄H₁₈ (C, 94.09; H, 5.91%). It has been shown (C. A. 31, 7868.8) that I has the formula of 1,8-dimethylpicene (II) and, by an unessential modification of previously established methods (C. A. 30, 4484.1) for the synthesis of picene homologs, II has been synthesized and its identity with I established.
7-Methyl-1-keto-1,2,3,4-tetrahydronaphthalene (20 g.) in 100 cc. of dry benzene was treated with 20 g. of coarse Zn powder activated with I₂. The mixture was warmed and 50 g. BrCH₂CO₂Et was slowly run in. After the initial vigorous reaction the product was heated on the steam bath for 4 hrs., cooled, decomposed with iced HCl and extracted with Et₂O. The washed, dried extract was evaporated and the brown residue was dehydrated at 180° in the presence of a few grains of I₂. Distillation of the product in a high vacuum yielded 18 g. of yellow oily Et 7-methyl-3,4-dihydronaphthylacetate, b_{0.4} 112-22°, reduced in 200 cc. alc. with the addition of 54 g. of clean portions of Na to the corresponding alc., β -(7-methyl-3,4-dihydronaphthyl)ethanol, b_{0.1} 115-18°, which was converted by heating in a sealed tube for 12 hrs. at 100° with 33% HBr in AcOH to the corresponding bromide (III), C₁₃H₁₇Br, b_{0.1} 104-5°. Condensation of o-MeC₅H₄CH₂Br with NaCH (CO₂Et)₂, saponification, decarboxylation and ring closure through the acid chloride gave 5-methyl-1-keto-1,2,3,4-tetrahydronaphthalene (IV), C₁₁H₁₂O, b₁₀ 143-5°, crystallizing from petr. ether in large crystals, m. 49-50° (all m. ps. corrected). IV (4 g.) in 40 cc. anhydrous Et₂O was added dropwise to a Grignard reagent prepared from 6 g. III and 1.2 g. Mg turnings in 60 cc. anhydrous Et₂O. The mixt was refluxed for 2 hrs., decomposed with iced HCl and, on working up, yielded 4.4 g. of α -(7-methyl-1,2,3,4-tetrahydronaphthyl)- β -(5-methyl-3,4-dihydronaphthyl)ethane (V), b_{0.1} 185-6°. Dehydrogenation of 4.4 g. V with 0.5 g. of finely divided PdO₂ at 320°, extraction of the cooled product with benzene, filtration, evaporation and distillation of the residue in a high vacuum produced 3.9 g. of a highly viscous oil, b_{0.1} 192-3°, crystallizing from hot MeOH to a crude product, m. about 75°, purified by chromatographic adsorption on an Al₂O₃ column and yielding from benzene colorless needles of α -(7-methylnaphthyl)- β -(5-

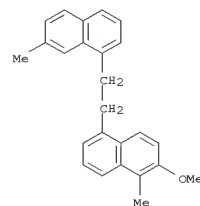
L43 ANSWER 608 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
methylnaphthyl)ethane (VI), C₂₄H₂₂, m. 74-5°. VI (0.9 g.) was shaken in 5 cc. CS₂ with 2 g. AlCl₃ for 3 days, decompd. with iced HCl and freed from CS₂ by steam distn. Washing with alc. and Et₂O gave 200 mg. of crude material which was sublimed at 260° in a high vacuum and crystd. from pyridine, yielding colorless leaflets of II, C₂₄H₁₈, m. 305-6°, which gave no depression on mixt. with preps. obtained by the dehydrogenation of gypsogenin or amylene. The Debye-Scherrer diagram of II was practically identical with those of the dehydrogenation products from gypsogenin, hederagenin, chinovaic acid, ursolic acid, friedelinol and β-amylene. In an almost identical manner, the Me ether of the hydroxydimethylpicene obtained by the dehydrogenation of amyrin, for which the constitution of 1,8-dimethyl-2-methoxypicene (VII) is as good as established, has also been synthesized. 2-Methyl-3-methoxy-*m*-chloracetophenone (25 g.) in 200 cc. alc. was added dropwise to NaCH(CO₂Et₂) (prepd. from 49 g. CH₂(CO₂Et)₂ and 5.6 g. Na) in 100 cc. anhyd. alc. The reaction mixt. was warmed overnight on the steam bath and the alc. was removed in vacuo. The residue was decompd. with ice and, after working up, produced 7.5 g. of ester, b_{0.5} 140-50°, which was sapond. by boiling for 2 hrs. with dil. KOH in MeOH. The crude acid was distd. in a high vacuum and on recrystn. from petr. ether gave colorless needles of γ-keto-γ-(2-methyl-3-methoxyphenyl)butyric acid, reduced according to Clemmensen to γ-(2-methyl-3-methoxyphenyl)butyric acid (VIII), C₁₂H₁₆O₃, b_{0.1} 144-5°, m. 109-10° (needles from petr. ether). VIII (4.5 g.) in 20 cc. anhyd. benzene was treated with 4 g. SOCl₂ in 2 cc. benzene, warmed for 1 hr. on the steam bath and thoroughly freed from solvent in vacuo. The crude acid chloride was taken up in 70 cc. CS₂ and added at 0° to 5 g. AlCl₃ layered over with CS₂. After standing overnight the mixt. was worked up and the product was distd., yielding 1.7 g. of 1-keto-5-methyl-6-methoxy-1,2,3,4-tetrahydronaphthalene (IX), C₁₂H₁₄O₂, b_{0.1} 123-4°, m. 114-15° (on crystn. from petr. ether). IX (1.3 g.) in 20 cc. Et₂O was added to a Grignard reagent prepd. from 6 g. III and 1.2 g. Mg in 60 cc. Et₂O. After boiling for 1 hr. on the steam bath and working up, the product was distd., giving 2.6 g. of α-(5-methyl-6-methoxy-3,4-dihydronaphthyl)-β-(7-methyl-1,2,3,4-tetrahydronaphthyl)ethane (X), b_{0.02} 197-8°. Dehydrogenation of 2.6 g. X with 0.5 g. PdO₂ produced a viscous oil, b_{0.01} 211-12°, crystg. from MeOH, which was purified by chromatographic adsorption to yield α-(5-methyl-6-methoxynaphthyl)-β-(7-methyl-1,2,3,4-tetrahydronaphthyl)ethane, C₂₅H₂₄O, m. 121-2°, converted by shaking for 3 days with AlCl₃ in CS₂ and working up as above to VII, C₂₅H₂₀O, m. 358-9°, identical with the dimethylmethoxypicene (XI) obtained by the dehydrogenation of amyrin. Purified samples of VII and XI gave practically identical Debye-Scherrer diagrams. These syntheses bring to a close the investigations of the constitution of the triterpenes with the aid of the dehydrogenation method and round out a series of investigations in the field of the polyterpenes which have lasted for 17 years (cf. C. A. 15, 3426). The method has been not only of value in the field of the

L43 ANSWER 609 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1937:56700 CAPLUS
DOCUMENT NUMBER: 31:56700
ORIGINAL REFERENCE NO.: 31:7858e-1
TITLE: Derivatives of *o*-hydroxybenzylsulfonic acid
AUTHOR(S): Shearing, Edwin A.; Smiles, Samuel
SOURCE: Journal of the Chemical Society (1937) 1348-51
CODEN: JCSOA9; ISSN: 0368-1769
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 31:56700
AB HCHO, added to a solution of 63 g. Na₂SO₃ in 250 cc. H₂O containing 36 g. 2-C₁₀H₇OH in suspension, and heated 10 min. at 100°, gives 15 g. bis-(2-hydroxynaphthyl)-1-methane (I), m. 199°; it also results in 3.6 g. yield by boiling an aqueous solution of 50 cc. 4% NaOH containing 3.6 g. 2-C₁₀H₇OH and 6.5 g. Na 2-hydroxynaphthyl-1-methane-sulfonate (II) for 6 hrs.; boiling 6 g. of I with 40 cc. 2% NaOH and 5 g. Na₂SO₃ for 3 hrs. gives 2.2 g. I, 1.6 g. 2-C₁₀H₇OH, the sulfonate remaining in the aqueous liquor. 6,2-BrC₁₀H₆OH, Na₂SO₃ and HCHO give bis(6-bromo-2-hydroxy-1-naphthyl)methane, m. 240°, and Na 6-bromo-2-hydroxynaphthyl-1-methanesulfonate (III), plates; Pb salt, with 2H₂O. III, 2-C₁₀H₇OH and NaOH give 6-bromobis, (2-hydroxy-1-naphthyl)methane, m. 210° (decomposition); this also results from II and 6,2-BrC₁₀H₆OH, while the 3-Br isomer, m. 200° (decomposition) results from II and 3,2-BrC₁₀H₆OH. Saligenin and NaHSO₃, boiled 3 hrs., give Na 2-hydroxy phenylmethanesulfonate, yielding with PCl₅ benzylsulfone. Na *p*-cresol-3-methanesulfonate resulted by the reaction of NaHSO₃ with *p*-cresol-3-methanol or by boiling an aqueous solution of *p*-MeC₆H₄OH, Na₂SO₃ and HCHO for 3 hrs.; PCl₅ gives 5-methylbenzylsulfone, m. 91.5°. Na *m*-4-xenol-5-methanesulfonate was similarly prepared and identified as 5,7-dimethylbenzylsulfone, m. 92.5°. *p*-2-Xylenol-4-methanol was converted into Na *p*-2-xylenol-5-methanesulfonate, analyzed as the Ba salt. Bis(2-hydroxynaphthyl) 1-sulfide and Na₂SO₃, boiled 3 hrs., give Na 2-hydroxy-1-naphthylthiol-sulfonate, with 0.5 mol. H₂O of crystallization
The following sulfones were prepared by shaking a suspension of the relevant Na sulfinate in a C₆H₆ solution of 5-chloromethyl-*m*-4-xenol: Ph 2-hydroxy-3,5-di-methylbenzyl sulfone, m. 87°; *p*-tolyl analog, m. 103°; 2'-nitrophenyl analog, pale yellow, m. 168°. 1-(2-Hydroxy-3,5-dimethylbenzyl)-2-naphthol, m. 175°; di-Ac derivative, m. 99°. IT 68828-46-6P, 2-Naphthol, 1,1'-methylenebis[6-bromo-96344-45-5P, 2-Naphthol, 6-bromo-1,1'-methylenedi-RL: PREP (Preparation) (preparation of) RN 68828-46-6 CAPLUS CN 2-Naphthalenol, 1,1'-methylenebis[6-bromo- (CA INDEX NAME)

L43 ANSWER 608 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
sesquiterpenes but also in those of the di- and triterpenes and its exptl. worth has been enhanced by the unflinching assistance given by the application of the isoprene hypothesis. IT 47354-46-1P, Ethane, 1-(5-methyl-1-naphthyl)-2-(7-methyl-1-naphthyl)- 854222-92-7P, Ether, methyl 1-methyl-5-[2-(7-methyl-1-naphthyl)ethyl]-2-naphthyl RL: PREP (Preparation) (preparation of) RN 47354-46-1 CAPLUS CN Naphthalene, 1-methyl-5-[2-(7-methyl-1-naphthalenyl)ethyl]- (CA INDEX NAME)

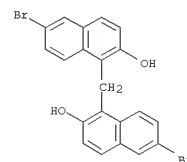


RN 854222-92-7 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

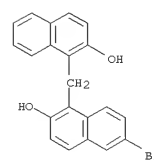


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

L43 ANSWER 609 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



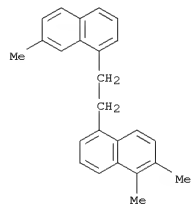
RN 96344-45-5 CAPLUS
CN 2-Naphthalenol, 6-bromo-1-[(2-hydroxy-1-naphthalenyl)methyl]- (CA INDEX NAME)



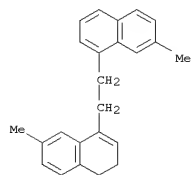
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

L43 ANSWER 610 OF 626 CAPLUS COPYRIGHT 2010 ACS ON STN
 ACCESSION NUMBER: 1936:34185 CAPLUS
 DOCUMENT NUMBER: 30:34185
 ORIGINAL REFERENCE NO.: 30:44831,4484a-1
 TITLE: Polyterpenes and polyterpenoids. CIV. Synthesis of 3,9,10-trimethylpicene and 3,8-dimethylpicene
 AUTHOR(S): Ruzicka, L.; Morgeli, E.
 SOURCE: Helvetica Chimica Acta (1936), 19, 377-86
 CODEN: HCACAV; ISSN: 0018-019X
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 OTHER SOURCE(S): CASREACT 30:34185
 AB The dehydrogenation of various triterpenes gives a hydrocarbon (I), m. about 306°. Its composition may be expressed as C₂₄H₁₈, C₂₅H₂₀ or C₂₆H₂₂ and it may accordingly be a di-, tri- or tetramethylpicene. Since the findings of degradation analyses have led to doubtful conclusions and since a knowledge of the structure of I is of some importance, an attempt has been made to solve the problem by synthesis. A preliminary test by adsorption spectra comparisons showed the probable validity of the assumption that I was a Me derivative of picene. A new synthesis was devised, consisting in the condensation of the Grignard compound of β -C₁₀H₇CH₂CH₂Cl with α -tetralone, dehydrogenation of the resulting hydrocarbon to a dinaphthylethane and cyclization with AlCl₃ in CS₂ at room temperature to picene. Synthesis of 3,9,10-trimethylpicene and (II) and 3,8-dimethylpicene (III) gave products which differed from I. From comparisons of absorption spectrum curves it is probable that I is a homologous-picene. The condensation product of toluene and succinic anhydride was reduced to MeC₆H₄(CH₂)₃CO₂H, converted into the chloride, b₁₁ 132°, and cyclized by treatment with AlCl₃ in CS₂ to 90% yields of 7-methyl-1-keto-1,2,3,4-tetrahydronaphthalene (IV), b₉ 131-2°. The dehydrogenation of 10 g. of IV with 4 g. of Pd black at 300-20° for 1.5 hrs. yielded 6 g. of 7-methyl-1-hydroxynaphthalene (V), b₁₀ 155-6°, m. 110-11°. A mixture of 10 g. of V with 15 g. of freshly prepared (NH₄)₂SO₃, 15 cc. of NH₄OH (d. 0.910) and 30 cc. of H₂O was heated in a bomb-tube at 160-70° for 20 hrs. The reaction product was extracted with Et₂O, freed from unchanged V with dilute Na₂CO₃ and shaken out with dilute HCl, yielding 8 g. of 7-methyl-1-aminonaphthalene, b₁₀ 162°, m. 58-9°; Ac derivative, C₁₃H₁₈NO, m. 178-9°. A solution of 27 g. of the amino compound in HCl at 90° was diazotized with 12 g. of NaNO₂ in 20% solution. Addition of the diazotized solution to a previously cooled KBr solution containing 116 g. of Hg(NO₃)₂ precipitated a yellow complex salt, (MeC₁₀H₆N₂Br)₂HgBr₂, which, on heating with 1.5 times its weight of finely powdered KBr, yielded 24 g. of 7-methyl-1-bromonaphthalene, b₁₂ 144.5-6.0°, picrate, m. 101-2°. The addition of a solution of 7 cc. of ethylene oxide in 50 cc. of Et₂O to a Grignard solution prepared from 35 g. of the Br compound, 7.6 g. of activated Mg and 100 cc. of Et₂O and diluted with 100 cc. of dry Et₂O and the decomposition of the reaction mixture after a 12 hrs. standing in a cooling mixture gave 15 g. of β -(7-methyl-1-naphthyl)ethanol, b_{0.5} 154-7° (p-nitrobenzoate, C₂₀H₁₇NO₄, m. 118-19°), converted by heating with SO₂Cl₂ in PhNMe₂

L43 ANSWER 610 OF 626 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)
 RL: PREP (Preparation)
 (prepn. of)
 RN 690231-16-4 CAPLUS
 CN Naphthalene, 1,2-dimethyl-5-[2-(7-methyl-1-naphthalenyl)ethyl]- (CA INDEX NAME)



RN 859187-21-6 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

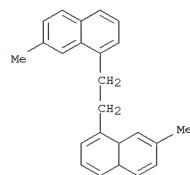


RN 859777-56-3 CAPLUS
 CN Ethane, 1-(5,6-dimethyl-1-naphthyl)-2-(7-methyl-1-naphthyl)-, picrate (3CI) (CA INDEX NAME)

CM 1

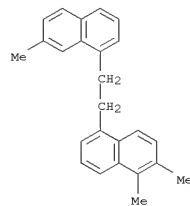
CRN 690231-16-4
 CMF C₂₅ H₂₄

L43 ANSWER 610 OF 626 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)
 into the corresponding chloride (VI), b_{0.4} 124-5°. The condensation product from β -(2,3-dimethylphenyl)ethyl bromide and CH₂(CO₂Et)₂ was saponified and decarboxylated to yield γ -(2,3-dimethylphenyl)butyric acid whose chloride, b₁₀ 144-6°, was cyclized in CS₂ in the presence of AlCl₃ to 1,2-dimethyl-5-keto-5,6,7,8-tetrahydronaphthalene (VII), C₁₂H₁₄O, b₈ 154-8°, m. 61-2°. A soln. of 7 g. of VII in 40 cc. of Et₂O was added dropwise to a Grignard soln. contg. 12.3 g. of VI, 4.3 g. of activated Mg and 40 cc. of Et₂O. Boiling for 12 hrs. and the customary decompn. and working up gave 10.2 g. of a viscous oil, b_{0.3} 215.7°, which on dehydrogenation over Pd black produced α -(7-methyl-1-naphthyl)- β -(5,6-dimethyl-1-naphthyl)ethane (VIII), C₂₅H₂₄, b_{0.2} 225-30°, m. 108.5-9.5°; picrate, C₃₇H₃₀N₆O₁₄, m. 167-8°. A soln. of 3 g. of VIII in 30 cc. of CS₂ was treated with 6 g. of AlCl₃ and shaken for 3 days. After decompn. with ice and HCl and removal of the CS₂, the washed residue was sublimed at 270° and 0.1 mm. Recrystn. from pyridine gave II, C₂₅H₂₀, m. 308-10°, which gave a m. p. depression of 10° when mixed with I prepd. by the dehydrogenation of gypsogenin. The reaction product from a Grignard soln. prepd. from 7 g. of VI and an Et₂O soln. of 5 g. of IV produced, as a highly viscous oil, 7 g. of α -(7-methyl-1-naphthyl)- β -(7-methyl-3,4-dihydro-1-naphthyl)ethane, b_{0.2} 198-205°, dehydrogenated over Pd black to α , β -bis(7-methyl-1-naphthyl)ethane (IX), C₂₄H₂₂, b_{0.8} 220-5°, m. 122.5-3.5°. A mixt. of 3 g. of IX, 30 cc. of CS₂ and 6 g. of AlCl₃ was shaken vigorously for 3 days and after decompn. was worked up as above, yielding III, m. 293-4°. IT 1195525-75-7P
 RL: SPN (Synthetic preparation); PRP (Properties); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (Polyterpenes and polyterpenoids. CIV. Synthesis of 3,9,10-trimethylpicene and 3,8-dimethylpicene)
 RN 1195525-75-7 CAPLUS
 CN Naphthalene, 4a,8a-dihydro-7-methyl-1-[2-(7-methyl-1-naphthalenyl)ethyl]- (CA INDEX NAME)



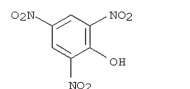
IT 690231-16-4F, Ethane, 1-(5,6-dimethyl-1-naphthyl)-2-(7-methyl-1-naphthyl)- 859187-21-6F, Ethane, 1-(3,4-dihydro-7-methyl-1-naphthyl)-2-(7-methyl-1-naphthyl)- 859777-56-3F, Ethane, 1-(5,6-dimethyl-1-naphthyl)-2-(7-methyl-1-naphthyl)-, picrate 859935-03-8F, Ethane, s-bis(7-methyl-1-naphthyl)-

L43 ANSWER 610 OF 626 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)

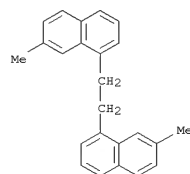


CM 2

CRN 88-89-1
 CMF C₆ H₃ N₃ O₇



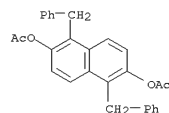
RN 859935-03-8 CAPLUS
 CN Ethane, s-bis(7-methyl-1-naphthyl)- (3CI) (CA INDEX NAME)



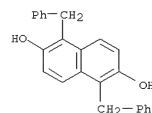
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
 (2 CITINGS)

L43 ANSWER 611 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1935:50681 CAPLUS
 DOCUMENT NUMBER: 29:50681
 ORIGINAL REFERENCE NO.: 29:6592e-1,6593a
 TITLE: Structure of naphthalene
 AUTHOR(S): Fieser, Louis F.; Lothrop, Warren C.
 SOURCE: Journal of the American Chemical Society (1935), 57, 1459-64
 CODEN: JACSAT; ISSN: 0002-7863
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 OTHER SOURCE(S): CASREACT 29:50681
 AB Methods which have served to locate the enol double bond of β -C10H7OH have been applied to a study of the bond structure of 2,6- and 2,7-C10H6(OH)2. The results indicate the presence in these compds. of enol groupings between the α - and β -positions in both rings and the absence of double bonds at the β,β -positions. It is clear that C10H8 contains 2 Kekul.akte.e rings, that these have the sym. arrangement of the Erlenmeyer formula, that the bond structure is immobile and that the hydrocarbon cannot exist to any appreciable extent in the unsym. form. The special structure very probably arises from the general tendency of unsatd. rings to assume and to preserve the aromatic type. 2,6-C10H6(OAc)2 and AlCl3 in CS2, refluxed 2 hrs., give 58% of 1,5-diaceto-2,6-dihydroxynaphthalene (I), pale yellow, m. 263°; diacetate, m. 189°; di-Me ether, m. 216°. Heating I with EtONa-EtOH at 170° gives the Me Et ether of 2,6-C10H6(OH)2 (?), m. 155°; hydrogenation of the di-Me ether of I with Cu chromite gives 69% of the di-Et compound, demethylated to 1,5-diethyl-2,6-dihydroxynaphthalene, pale yellow, m. 262°; di-Me ether, m. 186°. 2,6-Diallyloxynaphthalene, m. 112°; rearrangement gives 85% of 1,5-diallyl-2,6-dihydroxynaphthalene, m. 168°; dicoumarone derivative, m. 172°; di-Me ether, m. 113°; diallyl ether, m. 100°. 1,5-Dibenzyl-2,6-dihydroxynaphthalene, m. 191°; diacetate, m. 183°. 1,5-Dibenzoyl-2,6-dihydroxynaphthalene, bright yellow, m. 282°; diacetate, m. 226°. 1,6-Dihydroxydihydropleiadene, pale yellow, m. 217°; di-Me ether, pale yellow, m. 163°; diallyl ether, yellow, m. 93°. In an attempt to reduce 1,6-dihydroxy-12-pleiadone under high pressure, there resulted a compound, possibly 1-(o-methylbenzyl)-2,7-dihydroxynaphthalene, pale yellow, m. 235-6°. Methylation of derivs. of β -C10H7OH with MeOH, using p-MeC6H4SO3H, by heating 17 hrs. at 100°, gave the following results: β -C10H7OH 51%; 1-Et 0; 1-benzyl 0; 6-Me 74%; 3,7-di-Me 94%; 1-Cl 2%; 6-Br 26%; 1,6-Br2 2%; 3,6-Br2 11%. The original should be consulted for the discussion.
 IT 856206-77-4P, 2,6-Naphthalenediol, 1,5-dibenzyl-, diacetate
 856206-84-3P, 2,6-Naphthalenediol, 1,5-dibenzyl-
 RL: PREP (Preparation)
 (preparation of)
 RN 856206-77-4 CAPLUS
 CN 2,6-Naphthalenediol, 1,5-bis(phenylmethyl)-, 2,6-diacetate (CA INDEX NAME)

L43 ANSWER 611 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



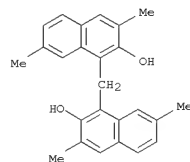
RN 856206-84-3 CAPLUS
 CN 2,6-Naphthalenediol, 1,5-bis(phenylmethyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
 (2 CITINGS)

L43 ANSWER 612 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1932:20829 CAPLUS
 DOCUMENT NUMBER: 26:20829
 ORIGINAL REFERENCE NO.: 26:21994,2199a-d
 TITLE: Preparation of trimethylnaphthalenes from 2,6-dimethylnaphthalene
 AUTHOR(S): Vesely, V.; Stursa, F.
 SOURCE: Collection of Czechoslovak Chemical Communications (1932), 4, 21-31
 CODEN: CCCCAK; ISSN: 0010-0765
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 AB 2,6-C10H6(NH2)2 (40 g.) in 50 g. CS2 was treated with 44.4 g. Br. From the product 2,6-dimethyl-1,5-dibromonaphthalene, m. 160-1°, crystallized out (11 g.). The remaining oil on fractionation under reduced pressure gave 26 g. of 2,6-dimethyl-1-bromonaphthalene, b8 177-80°, m. 33-4°. The Mg compound of the latter with Me2SO4 gave 1,2,6-C10H5Me3 (Baeyer and Villiger, Ber. 32,2447(1899)). Twenty g. of 1,2,6-C10H5(OH)Me2 (cf, C. A. 13, 2357) in 600 cc. of boiling 50% AcOH treated with 4.3 g. of 40% CH2O and then with 12.5 cc. concentrated HCl gave 2,2',6,6'-tetramethyl-7,7'-dihydroxy-8,8'-dinaphthylmethane, m. 231°. A treatment of this with 4% aqueous NaOH and Zn dust by the method of Fires and Hubner (Ber. 39, 435(1906)) gave 2,6,8-trimethyl-7-naphthol, m. 106-7°, which on distillation over Zn dust gave 2,6,8-trimethylnaphthalene, an oil; picrate, C19H17O7N3, m. 143-4°. 2,6-Dimethyl-7-aminonaphthalene, m. 134-5°, was prepared from 25 g. of 7,2,6-C10H5(OH)Me2, 220 g. concentrated NH4OH and 165 g. 22% aqueous (NH4)2SO3 at 250° (18 g.); Ac derivative, m. 233-4°. The diazotized amine with Cu2Br2 gave 2,6-dimethyl-7-bromonaphthalene, m. 138-9°. This could not be methylated through the Mg derivative 2,6-Dimethyl-1-naphthol, from the nitro derivative through the amine, m. 133°. 2,6-Dimethyl-4-nitro-1-acetaminonaphthalene, m. 260°, prepared by nitrating the acetamide, on saponification with alc. HCl, gave 2,6-dimethyl-4-nitro-1-aminonaphthalene, m. 194-5°. 2,6-Dimethyl-4-nitro-1-naphthol, m. 137-8°, from the above amine. 2,6-Dimethyl-1,4-diaminonaphthalene, m. 134-5°, from the nitroamine with SnCl2 and HCl. The nitroamine diazotized and treated with EtOH gave 2,6-dimethyl-4-nitronaphthalene, m. 84-5°. By reduction of the latter, 2,6-dimethyl-4-aminonaphthalene, m. 93-4°, was obtained; Ac derivative, m. 207-8°. IT 858021-20-2P, 2-Naphthol, 1,1'-methylenebis[3,7-dimethyl- RL: PREP (Preparation)
 (preparation of)
 RN 858021-20-2 CAPLUS
 CN 2-Naphthol, 1,1'-methylenebis[3,7-dimethyl- (3CI) (CA INDEX NAME)

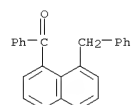
L43 ANSWER 612 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



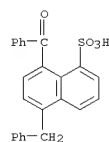
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
 (2 CITINGS)

L43 ANSWER 613 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1932:917 CAPLUS
 DOCUMENT NUMBER: 26:917
 ORIGINAL REFERENCE NO.: 26:131f-1,132a-g
 TITLE: Synthetical and constitutional investigations in the naphthalene group. I. New hydrocarbons and ketones, derivatives of 1-naphthylphenylmethane (1-benzyl-naphthalene) and of phenyl 1-naphthyl ketone (1-benzoyl-naphthalene)
 AUTHOR(S): Dziewonski, K.; Moszew, J.
 SOURCE: Roczniki Chemii (1931), 11, 169-92;191-2 in French
 CODEN: ROCHAC; ISSN: 0035-7677
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 GI For diagram(s), see printed CA Issue.
 AB cf. C. A. 23, 3220, 3923. Treating C10H8 with PhCH2Cl (+AlCl3) gives, as previously reported, in addition to 1,8-C10H6(CH2Ph)2, a hydrocarbon, m. 88°. This yields on oxidation with dilute HNO3 1,4-C10H6Bz2 and is, therefore, 1,4-dibenzyl-naphthalene (I). Both isomers are also formed by treating 1-C10H7CH2Ph with PhCH2Cl (+ZnCl2). I may also be obtained by interaction of 1-C10H7CH2Ph and BzCl (+AlCl3) whereby 1,4-benzylbenzoyl-naphthalene (II) is formed, and this, in turn, when oxidized with HNO3, gives 1,4-C10H6Bz2. Reduction of the latter with Na in alc. leads to the formation of I and of 1,4-dibenzyltetrahydronaphthalene. Heating with AlCl3 transforms II into naphthohydrobenzanthrone (4,5,8,9-dibenzo-10-keto-3-hydropyrene) (III). The action of PhCH2Cl on 1-C10H7Bz (+AlCl3) gives as the main product 1-benzoyl-8-benzyl-naphthalene (IV), an isomer of the 1,4-ketone. It is oxidized by HNO3 to peri-C10H6Bz2. Heating with AlCl3 transforms IV by intramol. condensation into benzylchrysofluorenone (benzylbenzofluorenone) (V). Interaction of AcCl and 1-C10H7CH2Ph gives 2 ketones: 1-benzyl-4-acetyl- (VI) and 1-benzyl-4,8-diacetylnaphthalene (VII). A similar reaction takes place with EtCOCl, whereby 1,4-C10H6(CH2Ph)COEt is formed. Evidently, when in C10H8 derivs. position 1 is substituted by alkaryl groups, addnl. alkaryl, aroyl or acyl groups are directed in the p-position while in an analogous reaction, when position 1 is substituted by aroyl groups, other substituents are directed in the peri-position. I, obtained by heating 1-C10H7CH2Ph and PhCH2Cl in presence of ZnCl2 at first on a water bath, then at 120-30°, m. 88°. 1,4-Dibenzoyl-naphthalene, prepared by oxidation of I with dilute HNO3, m. 105-6°; dioxime, m. 261° (decomposition). II, from 1-C10H7CH2Ph, BzCl and ZnCl2, yield 50-60%. Phenylhydrazones, m. 155-6°; oxime, m. 202-3°. II, heated with dilute HNO3, gives 1,4-C10H6Bz2; its reduction in boiling absolute alc. with Na leads to I and 1,4-dibenzyltetrahydronaphthalene, m. 92-3°. II nitrated with HNO3 + H2SO4 in AcOH gives 1-benzyl-4-benzoyl-5-nitronaphthalene, yellow, m. 165-6°. II with ClSO3H in CHCl3 and NaCl gives 1-benzyl-4-benzoyl-5-naphthalenesulfonic acid; Na salt; chloride, m. 155-6°; amide, m. 182-3°; aniline salt, m. 221-2°. III, formed by heating, first at 130°, later at 145-50°, 10 g. of II and 50 g. of AlCl3 with constant stirring and suction of the generated HCl, seps. from AcOH, ligroin and alc. in brown-yellow needles, m. 169-70°. III is difficultly reduced by boiling alkaline Na2S2O4; as a lake dye it stains cotton

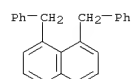
L43 ANSWER 613 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



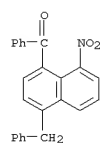
RN 859071-48-0 CAPLUS
 CN 1-Naphthalenesulfonic acid, 8-benzoyl-5-(phenylmethyl)- (CA INDEX NAME)



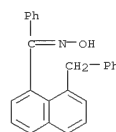
IT 113750-62-2P, Naphthalene, 1,8-dibenzyl- 856209-58-0P
 , Ketone, 4-benzyl-8-nitro-1-naphthyl phenyl 859071-25-3P,
 1-Naphthalenesulfonyl chloride, 8-benzoyl-5-benzyl-
 RL: PREP (Preparation)
 (preparation of)
 RN 113750-62-2 CAPLUS
 CN Naphthalene, 1,8-bis(phenylmethyl)- (CA INDEX NAME)



RN 856209-58-0 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED



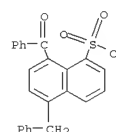
L43 ANSWER 613 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
 yellow-red; its soln. in concd. H2SO4 is yellow-red. IV, bright yellow, m. 142°; its soln. in concd. H2SO4 is orange-red. Oxime, yellow, m. 220-2°. IV with dil. HNO3 yields 1,8-dibenzoyl-naphthalene, yellow, m. 189-90°; the H2SO4-soln. is blood-red. Dioxime, yellow-brown, m. 270° (decompn.); bis(phenyl-hydrazone), yellow, m. 270-1°. V is obtained by heating 10 g. of IV with 50 g. AlCl3 first at 120-5°, later at 140-5°, yellow, m. 167-8°; its soln. in cold concd. H2SO4 is orange-red. VI, m. 75°, b12 240-5° (yield 60%). Its H2SO4 soln. is yellow-green VII, b12 265-70°, m. 135° (yield 10%); the H2SO4 soln. is yellow. Picrate of VI, yellow, m. 113°, oxime, m. 240-1°. By bubbling HCl in the AcOH soln. of this oxime and subsequent heating of the mixt. to 100° is formed 1-benzyl-4-acetamidonaphthalene (VIII), crystals with a violet luster, m. 208-9°. Heating of VIII with dil. HCl and decomn. of the resulting HCl salt gives 1-benzyl-4-aminonaphthalene, crystals which become slightly brown in air, m. 114°. 1-Benzyl-4-acetyl-5-nitronaphthalene, by nitration of VI in AcOH, yellow, m. 153°. 1-Benzoyl-4-naphthoic acid, by oxidn. of VI with 10% HNO3, yellow, m. 180-1°; the H2SO4 soln. is orange. 1-Benzyl-4-pro-plionynaphthalene, formed similarly to VI, b22 273-5°, m. 69-70° (oxime m. 129-30°). On oxidn. with HNO3 it gives also 1,4-C10H6BzCO2H. 1-Benzoyl-4-naphthalene-sulfonic acid (Na salt) is formed on treating 1-C10H7Bz in PhNO2 with 1 mol. ClSO3H; yield 60%. Aniline salt, m. 236-7°; chloride, crystals from CCl4, m. 117-9°; amide m. 199-200°; anilide, m. 175-7°. Fusion of the acid with KOH yields α-naphthol.
 IT 858027-72-2P
 RL: SPN (Synthetic preparation); PRP (Properties); PREP (Preparation)
 (Synthetical and constitutional investigations in the naphthalene group. I. New hydrocarbons and ketones, derivatives of 1-naphthylphenylmethane (1-benzyl-naphthalene) and of phenyl 1-naphthyl ketone (1-benzoyl-naphthalene))
 RN 858027-72-2 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED



IT 31108-32-4, Ketone, 8-benzyl-1-naphthyl phenyl
 859071-48-0, 1-Naphthalenesulfonic acid, 8-benzoyl-5-benzyl-
 (and derivs.)
 RN 31108-32-4 CAPLUS
 CN Methanone, phenyl[8-(phenylmethyl)-1-naphthalenyl]- (CA INDEX NAME)

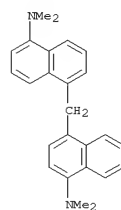
L43 ANSWER 613 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 859071-25-3 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED



L43 ANSWER 614 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1931:13850 CAPLUS
 DOCUMENT NUMBER: 25:13850
 ORIGINAL REFERENCE NO.: 25:1515g-4,1516a
 TITLE: Naphthalene series. II. Diaryl- and triarylmethane derivatives of dimethyl- α -naphthylamine
 AUTHOR(S): Gokhle, Basker; Mason, Frederick A.
 SOURCE: Journal of the Chemical Society (1931) 118-26
 CODEN: JCSOA9; ISSN: 0368-1769
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 AB cf. C. A. 24, 5296. (Me₂NC₁₀H₆)₂CH₂, m. 181-2.5°, was obtained from α -C₁₀H₇NMe₂ and HCHO in AcOH-HCl and methylal in AcOH-HCl or H₂SO₄; the base was surprisingly resistant to oxidizing agents; chloranil in glacial AcOH at 110° gives 2% of 4,4'-tetramethyldiamino-1,1'-dinaphthylcarbinol, m. 184-6°; cold AcOH gives a faintly green solution, becoming blue-violet on warming; concentrated HCl or H₂SO₄ gives a deep yellow solution 4-Dimethylamino-1-naphthoyl chloride and anilide were prepared from the acid. Attempts to prepare the ketone (Me₂NC₁₀H₆)₂CO from this chloride and α -C₁₀H₇NMe₂ in C₂H₂Cl₄ gave only tarry products. 4,4',4'''-Hexamethyltriaminotrinaphthylmethane, m. 266-7.5°, is formed from α -C₁₀H₇NMe₂ and HC(OEt)₃ with AlCl₃ at 70°. Me₂NC₁₀H₆COCl and PhNMe₂ with AlCl₃ in C₂H₂Cl₄ give 4,4'-tetramethyldiaminophenyl-1-naphthyl ketone, m. 128.5-9°; Et₂O, EtOH and dilute mineral acids give light greenish yellow solns. With POC₁₃ the ketone condenses with PhNMe₂, yielding a deep blue dye, probably identical with "Naphthoblau." Reduction with Na-Hg in EtOH gives the corresponding carbinol, pale yellow, m. 62-3°; the AcOH solution is a brilliant blue. 4-H₂NC₁₀H₆NMe₂; obtained by reduction of the 4-NO derivative, yields an Ac derivative, m. 185°. Attempts to prepare the analog of methylene-blue B failed. Absorption curves of the carbinols in AcOH are given; values calculated according to Moir's theory agree with the observed maxima.
 IT 1081823-73-5P
 RL: SPN (Synthetic preparation); PRP (Properties); PREP (Preparation) (Naphthalene series. II. Diaryl- and triarylmethane derivatives of dimethyl- α -naphthylamine)
 RN 1081823-73-5 CAPLUS
 CN 1-Naphthalenamine, 4-[[5-(dimethylamino)-1-naphthalenyl]methyl]-N,N-dimethyl- (CA INDEX NAME)

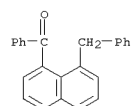
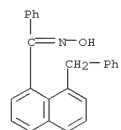
L43 ANSWER 614 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



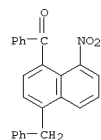
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
 (2 CITINGS)

L43 ANSWER 615 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1931:13847 CAPLUS
 DOCUMENT NUMBER: 25:13847
 ORIGINAL REFERENCE NO.: 25:1515c-d
 TITLE: peri-Benzoyl and -benzyl derivatives of naphthalene
 AUTHOR(S): Dziewonski, K.; Auerbach, J.; Moszew, J.
 SOURCE: Bull. intern. acad. polonaise (1929), A, 658-63
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 AB 1-Benzoyl-8-benzyl-naphthalene, m. 142° (oxime, m. 220-2°), is prepared by the action of PhCH₂Cl on 1-C₁₀H₇Bz in the presence of AlCl₃ at 160-70°. Oxidation of this with HNO₃ yields 1,8-C₁₀H₆Bz₂ (bisphenylhydrazone, m. 270-1°, dioxime, m. 270°) (cf. C. A. 23, 3220, 3923).
 IT 31108-32-4P, Ketone, 8-benzyl-1-naphthyl phenyl
 856209-58-0P, Naphthalene, 4-benzoyl-1-benzyl-5-nitro-
 858027-72-2P, Ketone, 8-benzyl-1-naphthyl phenyl, oxime
 RL: PREP (Preparation) (preparation of)
 RN 31108-32-4 CAPLUS
 CN Methanone, phenyl[8-(phenylmethyl)-1-naphthalenyl]- (CA INDEX NAME)

L43 ANSWER 615 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

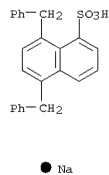


RN 856209-58-0 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

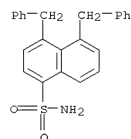


RN 858027-72-2 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

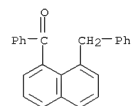
L43 ANSWER 616 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1931:13846 CAPLUS
 DOCUMENT NUMBER: 25:13846
 ORIGINAL REFERENCE NO.: 25:1515a-c
 TITLE: 1,4-Dibenzyl-naphthalene and its corresponding keto derivatives
 AUTHOR(S): Dziejowski, K.; Moszew, J.; Lepiankiewicz, S.; Sucherl, L.
 SOURCE: Bull. intern. acad. polonaise (1929), A, 650-7
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 AB The dibenzyl-naphthalene, m. 88°, obtained as one of the products of the action of PhCH₂Cl on ClOH₈ in presence of AlCl₃ or fused ZnCl₂ ("β-dibenzyl-naphthalene" of Dzielow.acte.nski and Moszew, C. A. 23, 3220, 3923) is now shown to be 1,4-dibenzyl-naphthalene (picrate, m. 107°), also prepared by the reduction of 4-benzoyl-1-benzyl-naphthalene, m. 113° (phenylhydrazone, m. 155-6°; oxime, m. 202-3°). The latter is obtained by the interaction of 1-ClOH₇CH₂Ph and BzCl in presence of fused ZnCl₂. The orientation of both compds. is established by their oxidation with HNO₃ to the known 1,4-ClOH₆Bz₂, m. 106° (Scholl and Neumann, C. A. 16, 2143) (dioxime, m. 261°). Treatment of 1,4-ClOH₆(CH₂Ph)₂ with ClSO₃H at the ordinary temperature affords 1,4-dibenzyl-naphthalenesulfonic acid, isolated as the Na salt. Nitration of 4,1-ClOH₆BzCH₂Ph yields a mononitro derivative, m. 172-3°. A by-product of the reduction of the same compound is 1,4-dibenzyl-tetrahydronaphthalene, m. 92-3°. IT 856202-96-5P, 1-Naphthalenesulfonic acid, 5,8-dibenzyl-, sodium salt
 RL: PREP (Preparation)
 RN 856202-96-5 CAPLUS
 CN 1-Naphthalenesulfonic acid, 5,8-bis(phenylmethyl)-, sodium salt (1:1)
 (CA INDEX NAME)



L43 ANSWER 617 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

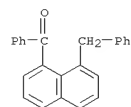


L43 ANSWER 617 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1929:33376 CAPLUS
 DOCUMENT NUMBER: 23:33376
 ORIGINAL REFERENCE NO.: 23:3923g-i
 TITLE: Preparation of α-chloronitronaphthalenes
 AUTHOR(S): Asaoka, Ryo
 SOURCE: Bull. Tokyo Ind. Research Inst (1928), 23(9), 1-26
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 AB For the study of the industrial use of Chloronaphthalene in dye industry first α-chloronaphthalene, and then its 3 mononitro derivs. and 2 dinitro derivs. were prepared pure, the m.-p. diagrams for 2 component systems being then constructed. The eutectic points found are: in 1,4-1,5-system, 74-5° (1,4- 57%; 1,5- 43%); in 1,4-1,8-system, 52-3° (1,4- 57%; 1,8- 43%); in 1,5-1,8-system, 66-7° (1,5- 45%; 1,8- 55%). When more than 60% of the 1,8-compound is present as a component the m.-p. curves of the 1,4- and 1,5-systems all coincide. In the 1,4,5-1,4,8-system, the eutectic lies at 117-8°. The composition being 1.4,5- 34%; 1,4,8- 66%. In preparing α-chloronaphthalene, naphthalene was dissolved in CCl₄, and Cl₂ gas was passed at 50-60° into the solution with FeCl₃ as catalyst, or the naphthalene was melted and Cl₂ gas was passed into the melt at 100°. The resulting product was fractionally distilled to remove unreacted naphthalene and dichloronaphthalene. I₂, Zn powder and Fe powder were also tried as catalysts. In preparing 1,4-chloronitronaphthalene, α-chloronaphthalene was nitrated by means of HNO₃, and the product was crystallized several times from EtOH to remove the 1,5- and 1,8-isomers. In preparing 1,5-chloronitronaphthalene it was found convenient to start from 1,5-dinitronaphthalene, while in preparing the 1,8-compound α-naphthylamine was taken as the starting substance. IT 31108-32-4P, Ketone, 8-benzyl-1-naphthyl phenyl
 876482-87-0P, 1-Naphthalenesulfonamide, 4,5-dibenzyl-
 RL: PREP (Preparation)
 (preparation of)
 RN 31108-32-4 CAPLUS
 CN Methanone, phenyl[8-(phenylmethyl)-1-naphthalenyl]- (CA INDEX NAME)

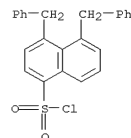


RN 876482-87-0 CAPLUS
 CN 1-Naphthalenesulfonamide, 4,5-bis(phenylmethyl)- (CA INDEX NAME)

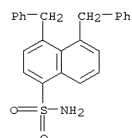
L43 ANSWER 618 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1929:33375 CAPLUS
 DOCUMENT NUMBER: 23:33375
 ORIGINAL REFERENCE NO.: 23:3923f-g
 TITLE: 1,8-Dibenzyl-naphthalene and two other isomeric hydrocarbons
 AUTHOR(S): Dziejowski, K.; Moszew, J.
 SOURCE: Rocauiki Chem. (1929), 9, 361-9 (369-70, French)
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 AB In addition to the compds. described in C. A. 23, 3220, there were prepared in the presence of AlCl₃ at 100°, 1,8-dibenzoyl-naphthalene bisphenylhydrazone, m. 270-1°; PhNH₂ salt of 1,8-dibenzyl-naphthalene-4-sulfonic acid, m. 252-3°; 1,8-dibenzyl-naphthalene-4-sulfonyl chloride, m. 151°; 1,8-dibenzyl-naphthalene-4-sulfonamide, m. 167°; 1-benzyl-8-benzoyl-naphthalene, light yellow, m. 113°. IT 31108-32-4P, Ketone, 8-benzyl-1-naphthyl phenyl
 856207-36-8P, 1-Naphthalenesulfonyl chloride, 4,5-dibenzyl-
 876482-87-0P, 1-Naphthalenesulfonamide, 4,5-dibenzyl-
 RL: PREP (Preparation)
 (preparation of)
 RN 31108-32-4 CAPLUS
 CN Methanone, phenyl[8-(phenylmethyl)-1-naphthalenyl]- (CA INDEX NAME)



RN 856207-36-8 CAPLUS
 CN 1-Naphthalenesulfonyl chloride, 4,5-bis(phenylmethyl)- (CA INDEX NAME)

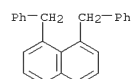


RN 876482-87-0 CAPLUS
 CN 1-Naphthalenesulfonamide, 4,5-bis(phenylmethyl)- (CA INDEX NAME)



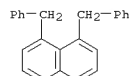
L43 ANSWER 619 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1929:27128 CAPLUS
 DOCUMENT NUMBER: 23:27128
 ORIGINAL REFERENCE NO.: 23:3220a-b
 TITLE: peri-Dibenzyl-naphthalene and two other isomeric hydrocarbons
 AUTHOR(S): Dziejowski, Karol; Moszew, Jan
 SOURCE: Bulletin International de l'Academie Polonaise des Sciences et des Lettres, Classe des Sciences Mathematiques et Naturelles, Serie A: Sciences Mathematiques (1928) 283-91
 CODEN: BIAMA3; ISSN: 0366-029X

DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 AB Three dibenzyl-naphthalenes were isolated by distillation in vacuo of the material left after separating α - and β -C10H7CH2Ph from the condensation of PhCH2Cl with C10H3 by AlCl3. I, colorless needles, m. 146.5°; II, fine needles, m. 88°; III, gleaming leaflets, m. 132°. I is obtained in best yields by condensing PhCH2Cl with α -C10H7CH2Ph by AlCl3. Oxidation to 1,8-C10H6Bz2 proves I to have been 1,8-dibenzyl-naphthalene. I. gives with difficulty a NO2 derivative, m. 141°, and can be sulfonated by ClSO3H. Both substitutions appear to be in the 4-position. II forms a picrate, orange needles, m. 107°. The constitution of II and III has not been established.
 IT 113750-62-2P, Naphthalene, 1,8-dibenzyl-
 RL: PREP (Preparation)
 (preparation of)
 RN 113750-62-2 CAPLUS
 CN Naphthalene, 1,8-bis(phenylmethyl)- (CA INDEX NAME)



L43 ANSWER 620 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1929:27127 CAPLUS
 DOCUMENT NUMBER: 23:27127
 ORIGINAL REFERENCE NO.: 23:3219h-4,3220a
 TITLE: The reactivity of the nitro group in 4,5-dinitroveratrole towards sodium methylate at 35° and 45°
 AUTHOR(S): Parys, A. H.
 CORPORATE SOURCE: Univ. Leiden
 SOURCE: Recueil des Travaux Chimiques des Pays-Bas et de la Belgique (1929), 48, 560-3
 CODEN: RTCPB4; ISSN: 0370-7539
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable

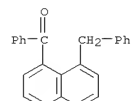
AB According to the investigation of Lorang (C. A. 22, 582) the introduction of the OMe group in the 5-position in 2,4-(O2N)2C6H3Cl slows down the reactivity toward NaOMe to about 1/3 of its value. The present paper deals with the influence of two OMe groups on the reactivity of a mobile nitro group. The reaction constant for the reaction between 4,5-dinitroveratrole and NaOMe in MeOH was found to be 0.0029 at 35° and 0.0088 at 45°. Taking into consideration that the reaction consts. for the reaction between o-C6H4(NO2)2 and NaOMe in MeOH are 0.0242 at 35° and 0.0695 at 45° (Rec. trav. chim. 18, 17(1899)), the consts. published here, are to be halved according to Lorang (C. A. 22, 582; Talen, C. A. 22, 1351), it follows that the introduction of 2 OMe groups in o-C6H4(NO2)2 slows down the reactivity toward NaOMe about 8 times. The following solubilities of 4,5-dinitroveratrole in absolute MeOH were determined: at 15°, 0.0766 g.; at 25°, 0.1054 g.; at 35°, 0.1821 g. and at 45°, 0.2495 g. in 10 cc MeOH.
 IT 113750-62-2P, Naphthalene, 1,8-dibenzyl-
 RL: PREP (Preparation)
 (preparation of)
 RN 113750-62-2 CAPLUS
 CN Naphthalene, 1,8-bis(phenylmethyl)- (CA INDEX NAME)



L43 ANSWER 621 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1929:24817 CAPLUS
 DOCUMENT NUMBER: 23:24817
 ORIGINAL REFERENCE NO.: 23:2923g-h
 TITLE: Tower for sintering earthy ores and foundry products
 INVENTOR(S): Daub, Albert
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

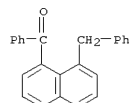
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 472916	-----	19290307	DE 1927-D52151	19270125

AB Details are given of the arrangement of the ore, fuel, sintering material and air current.
 IT 31108-32-4P, Naphthalene, 1-benzoyl-8-benzyl-
 RL: PREP (Preparation)
 (preparation of)
 RN 31108-32-4 CAPLUS
 CN Methanone, phenyl[8-(phenylmethyl)-1-naphthalenyl]- (CA INDEX NAME)

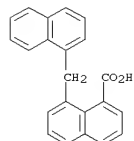


L43 ANSWER 622 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1929:24816 CAPLUS
DOCUMENT NUMBER: 23:24816
ORIGINAL REFERENCE NO.: 23:2923g
TITLE: Device for taking samples of ore, etc., as it passes through a hopper
INVENTOR(S): Dryden, W.; Knight, L.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	GB 298655		19281011	GB 1927-15586	19270611
AB	Unavailable				
IT	31108-32-4P, Naphthalene, 1-benzoyl-8-benzyl-				
	RL: PREP (Preparation)				
	(preparation of)				
RN	31108-32-4 CAPLUS				
CN	Methanone, phenyl[8-(phenylmethyl)-1-naphthalenyl]-			(CA INDEX NAME)	

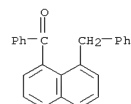


L43 ANSWER 624 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1927:26338 CAPLUS
DOCUMENT NUMBER: 21:26338
ORIGINAL REFERENCE NO.: 21:3197a-c
TITLE: Benzalarylphthalans and -naphthalans and the transformation of the first into disubstituted
indones
AUTHOR(S): Weiss, Richard; Fastmann, Paul
SOURCE: Monatshefte fuer Chemie (1927), 47, 727-32
CODEN: MOCMB7; ISSN: 0026-9247
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Phenylphthalide (10 g.) in absolute C6H6, and PhCH2MgCl (from 7 cc. PhCH2Cl) give 5.3 g. benzalphenylphthalan, yellow, m. 121-3°; after several wks. it changes to a resin; with Br in CHCl3 it gives diphenylindone. Benzal-p-tolylphthalan, m. 150-5° (50% yield); Br gives 2-phenyl-3-p-tolylindone, red, m. 136-7°. Naphthalic anhydride and α -C10H7MgBr give 65% of 8- α -naphthoyl-1-naphthoic acid, m. 208-12°; with HI and red P in AcOH this gives 60-5% of α -naphthyl-naphthalide, m. 192-4°. NaHg transforms this into di- α -naphthylmethane-8-carboxylic acid, m. 160-2°, while PhCH2MgCl gives 60% of α -naphthylbenzal-naphthalan, yellow, m. 173-7° 8-o-Toluy-1-naphthoic acid, m. 183-4° (70% yield); o-tolyl-naphthalide, m. 146-50°; o-tolylbenzal-naphthalan, yellow, m. 125-7° (50% yield).
IT 13974-87-3P, 1-Naphthoic acid, 8-(1-naphthylmethyl)-
RL: PREP (Preparation)
(preparation of)
RN 13974-87-3 CAPLUS
CN 1-Naphthalenecarboxylic acid, 8-(1-naphthalenylmethyl)- (CA INDEX NAME)

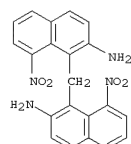


L43 ANSWER 623 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1929:24815 CAPLUS
DOCUMENT NUMBER: 23:24815
ORIGINAL REFERENCE NO.: 23:2923g
TITLE: Ore roasting
PATENT ASSIGNEE(S): Compagnie des metaux d'Overpelt-Lommel et de Corphalie
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

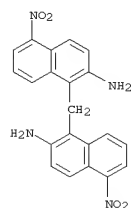
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	BE 354465		19281031	BE	
AB	Relatively cold gases are introduced into the roasting furnace at the points most liable to be overheated, the SO2 content increasing with the degree of cooling required.				
IT	31108-32-4P, Naphthalene, 1-benzoyl-8-benzyl-				
	RL: PREP (Preparation)				
	(preparation of)				
RN	31108-32-4 CAPLUS				
CN	Methanone, phenyl[8-(phenylmethyl)-1-naphthalenyl]-			(CA INDEX NAME)	



L43 ANSWER 625 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1923:11403 CAPLUS
DOCUMENT NUMBER: 17:11403
ORIGINAL REFERENCE NO.: 17:19601,1961a-d
TITLE: Interaction of formaldehyde and the nitronaphthylamines
AUTHOR(S): Morgan, G. T.; Jones, F. R.
SOURCE: Journal of the Society of Chemical Industry, London (1923), 42, 92-7T
CODEN: JSCIAN; ISSN: 0368-4075
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB HCHO has been condensed in turn with all the known O2NC10H6NH2 with the object of investigating the effect of the orientation of substituent groups on the reactivity of the amine towards this aldehyde. 1,2-O2N(H2N)C10H6 and HCHO in AcOH give methylenebis-1-nitro- β -naphthylamine, m. 222-3°; from hot AcOH it forms yellow needles, which are converted into red needles by crystallizing from boiling AcOH, when heated with CHCl3 or C6H6 or by solution in boiling C5H5N. The red modification was readily converted to the yellow by boiling with glacial AcOH and cooling. 1,4-H2NC10H6NO2 and HCHO in cold glacial AcOH give 4,4'-dinitro-I,I'-diamino-2,2'-dinaphthylmethane, yellow, m. 268-70° (decomposition); alkaline β -C10H7OH and the diazonium sulfate gave 4,4'-dinitro-2,2'-dinaphthylmethane-I,I'-bisazo- β -naphthol, brownish red, m. 257-8° and giving deep blue solns. in alkalies or cold concentrated H2SO4. 1,2-H2NC10H6NO2 gave 2,2'-dinitro-I,I'-diamino-4,4'-dinaphthylmethane, golden yellow, m. 299-301° (decomposition). In alc. or glacial AcOH, HCHO and 2,5-H2NC10H6NO2 condense even in the cold to a mixture of substances, which, boiled with mineral acid, in part regenerates the components and in part gives a dinaphthacridine. In the presence of HCl (1 mol. equivalent) is formed 5,5'-dinitro-2,2'-diamino-I,I'-dinaphthylmethane, reddish brown, m. 233-5°, which is changed by 2-3 hrs. heating in contact with the HCl-EtOH into 5,5'-dinitrodinaphthacridine, reddish brown, darkens 250°, decomp. above 290°. 2,8-H2NC10H6NO2 and HCHO in cold EtOH give methylenebis-8-nitro- β -naphthylamine, crimson, m. 178°. In the presence of HCl, small yields are obtained of 8,8'-dinitro-2,2'-diamino-I,I'-dinaphthylmethane, golden yellow, m. 209-10° (decomposition). Methylene-bis-8-nitro- α -naphthylamine, chocolate-brown, changing to almost pure red at 143-5° and m. 161-2°. In AcOH 8,8'-dinitro-I,I'-diamino-4,4'-dinaphthylmethanetriformaldehyde, pale yellow, m. 172-3°, results; repeated crystallization did not cause dissociation into its components. When heated in a dry tube or with dilute mineral acids, HCHO was evolved but the pure methane base was not obtained; the azo compound with β -C10H7OH is crimson and decomp. above 270°. 1,5-H2NC10H6OH and HCHO give rise to illdefined and inseparable products.
IT 861332-37-8P, 2-Naphthylamine, 1,1'-methylenebis[8-nitro-861352-41-2P, Methane, 2,2'-diamino-5,5'-dinitro-1,1'-dinaphthyl-
RL: PREP (Preparation)
(preparation of)
RN 861332-37-8 CAPLUS
CN Methane, 2,2'-diamino-8,8'-dinitro-1,1'-dinaphthyl- (2CI) (CA INDEX NAME)



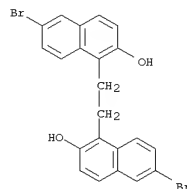
RN 861352-41-2 CAPLUS
CN 2-Naphthylamine, 1,1'-methylenebis[5-nitro- (2CI) (CA INDEX NAME)



L43 ANSWER 626 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1920:274 CAPLUS
DOCUMENT NUMBER: 14:274
ORIGINAL REFERENCE NO.: 14:67e-i,68a-e
TITLE: Oxidation of phenols. III. Polymerization of methylenequinones to cyclic dehydrophenols
AUTHOR(S): Pummerer, Rudolf; Cherbuliez, Emil
SOURCE: Bayr. Akad. Wiss., Munchen Ber. (1919), 52B, 1392-402
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Cf. C. A. 9, 316. As had been found in an earlier investigation, dehydro[1-methyl-2-naphtol (I), when boiled in xylene, decomps. into equal

parts of 1,2-ClOH6MeOH and the methylenequinone-(1,2-naphthoquinone-1-methide), ClOH6(·CH2)O; the latter, however, was not isolated in the monomol. form, as it at once polymerizes. This alkaline-insol., S-yellow polymer (A) has now been obtained in prisms from 96% alc., m. 143°, mol. weight in freezing C6H6 317, yields with excess of PhNHNH2 only a monophenylhydrazone, yellow-red platelets from AcOH, m. 233°. Boiled a short time in 10 parts AcOH with Zn dust until decolorized, A gives α,β-di-2-naphtholethane [2,1-ClOH6(OH)CH2-]2 (B), plates from xylene, m. 253° under CO2 (when melted in air or heated in solution it undergoes oxidation and becomes yellow), soluble in not too concentrated alkali, more NaOH precipitating the sodium salt in scales; boiled 0.5 hr. with Ac2O and at once treated with a little AcOH and Zn dust to offset an oxidation manifested by the appearance of a yellow color, it gives a diacetate, elongated monoclinic tables from benzine (b. 120-30°), m. 233-4°, insol. in dilute NaOH. Treated with K3Fe(CN)6 in dilute alkaline solution, B regenerates A. R. and C. conclude that A is dehydro [α,β-di-2-naphtholethane] (II). Dehydro [α,β-6,6'-dibromo-di-2-naphtholethane], similarly obtained from the di-Br derivative of 1, seps. from AcOEt in yellow prisms, m. 177°, soluble in concentrated H2SO4 with yellow color changing through green to red-brown, decolorizes KMnO4 in Me2CO or C5H5N, does not oxidize quinol even on warming, mol. weight in freezing C6H6 457; phenylhydrazone, red-brown needles from alc. or AcOH (thick prisms from alc. on slower crystallization), m. 237-8°. α,β-[6,6'-Dibromodi-2-naphtholethane], needles from xylene, m. 275° under CO2, easily soluble in not too concentrated alkalies, the salt separating on cooling from a hot concentrated solution, reconverted into the dehydro compound by K3Fe(CN)6 in alkaline solution. The 7 methylenequinones with-out substituents in the =CH2 grouping described in the literature are prepared by 2 methods: (1) By the action of HNO2 in some form on phenols. For 3 of the compds. prepared by this method (tetrachloro-p-methylenequinone and naphtho- and 6-bromonaphtho-o-methylenequinone), it has already been shown that they are open dehydrophenols which can be reduced back to the original phenol and hence are to be considered quinol ethers of the type I. As these compds. partially decompose into methylenequinones when their solns. are warmed, it is clear that their solns. will give the typical addition reactions of methylenequinones. (2) By the action of weak alkaline reagents on pseudohalides. The compds. prepared by this method are surprizingly unreactive; they are practically unchanged by long boiling with MeOH, AcOH, AcCl or Ac2O. This behavior is easily explained if the compds. are assumed to be cyclic dehydro substances of the type II. Zincke's

L43 ANSWER 626 OF 626 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
"tetrachloro-p-methylenequinone" (C), obtained in 80% yield from 5 g. quinitrol rubbed with 25 cc. MeOH and allowed to stand, with frequent rubbing, 2 hrs. in an empty desiccator, liberates from HI in moist alc.
or Me2CO, in its redaction to tetrachloro-p-cresol, only 2 atoms 1, whereas it should set free 4 atoms if it had the methylenequinone structure. Its mol. wt. in freezing C6H6 (260-330; calcd. 490) shows that the double
mol. is almost completely decompd.; after 0.5 hr. the solns. become turbid
From the sepn. of white flocks (presumably of the polymeric methylenequinone) and after some hrs. the gradually decreasing depression of the f. p. becomes const. In C6H6 distd. over Na, very concd., intensely lemon-yellow solns. of C can be obtained, but after a few min. they deposit white flocks. From these fresh solns. petr. ether ppts. no C, although it is practically insol. in this solvent. This indicates that the low mol. wts. in C6H6 are not to be explained by dissociation into radicals. The extraordinarily long time required to dissolve the finely powdered C in Et2O, e. g., also leads to the conclusion that the soln. is accompanied by decompn.
IT 861332-30-1F, 2-Naphthol, 1,1'-ethylenebis[6-bromo-
RL: PREP (Preparation)
(preparation of)
RN 861332-30-1 CAPLUS
CN 2-Naphthol, 1,1'-ethylenebis[6-bromo- (2CI) (CA INDEX NAME)



=> fil reg

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
155.57	1503.09

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-22.10	-73.10

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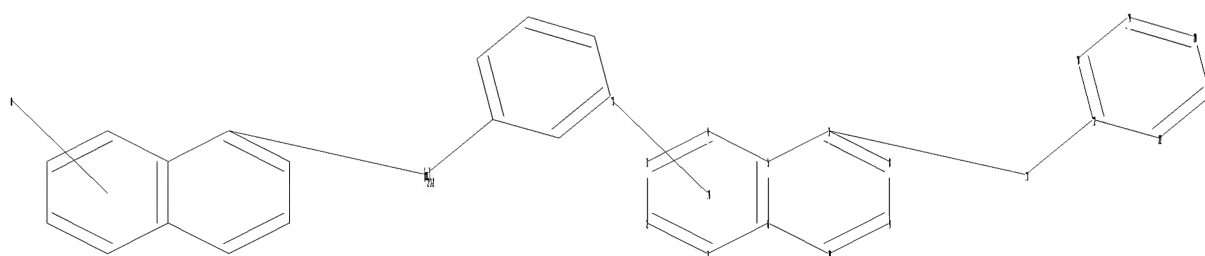
STRUCTURE FILE UPDATES: 10 FEB 2010 HIGHEST RN 1205743-44-7
DICTIONARY FILE UPDATES: 10 FEB 2010 HIGHEST RN 1205743-44-7

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predicted properties as well as tags indicating availability of



chain nodes :

11 13

ring nodes :

1 2 3 4 5 6 7 8 9 10 12 18 19 20 21 22

chain bonds :

7-11 11-12

ring bonds :

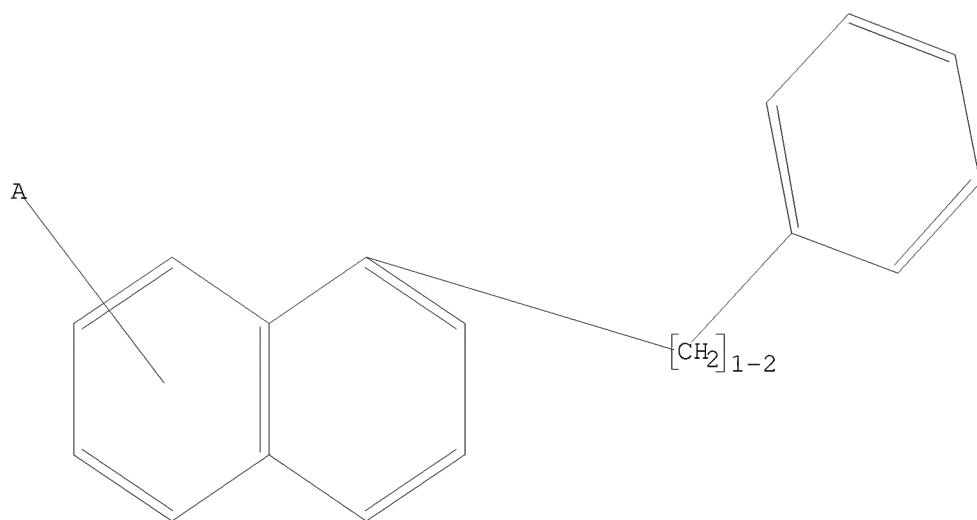
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20
20-21 21-22

exact bonds :

7-11 11-12

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-18 12-22 18-19 19-20



Structure attributes must be viewed using STN Express query preparation.
L46 QUE ABB=ON PLU=ON L45 AND L44

=> d his

(FILE 'HOME' ENTERED AT 10:59:25 ON 12 FEB 2010)

L23 0 S L22 FULL SUB=L17
L24 SCREEN 1841
L25 STRUCTURE UPLOADED
L26 QUE L25 AND L24
L27 491 S L26 FULL SUB=L17

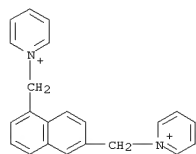
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L28 544 S L27

FILE 'REGISTRY' ENTERED AT 11:06:47 ON 12 FEB 2010
L29 SCREEN 1841
L30 STRUCTURE UPLOADED
L31 QUE L30 AND L29
L32 481 S L31 FULL SUB=L27
L33 10 S L27 NOT L32
L34 SCREEN 1841
L35 STRUCTURE UPLOADED
L36 QUE L35 AND L34
L37 2 S L36
L38 3850 S L36 FULL
L39 SCREEN 1841
L40 STRUCTURE UPLOADED
L41 QUE L40 AND L39
L42 1464 S L41 FULL SUB=L38

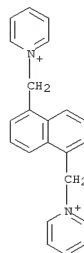
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L43 626 S L42

FILE 'REGISTRY' ENTERED AT 11:14:58 ON 12 FEB 2010

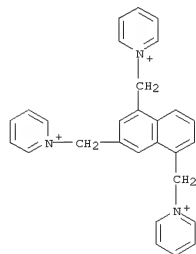
L50 ANSWER 170 OF 179 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 115212-97-0 REGISTRY
 ED Entered STN: 09 Jul 1988
 CN Pyridinium, 1,1'-[1,6-naphthalenediylbis(methylene)]bis- (9CI) (CA INDEX NAME)
 MF C22 H20 N2
 CI COM
 SR CA



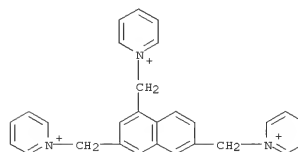
L50 ANSWER 171 OF 179 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 115212-95-8 REGISTRY
 ED Entered STN: 09 Jul 1988
 CN Pyridinium, 1,1'-[1,5-naphthalenediylbis(methylene)]bis- (9CI) (CA INDEX NAME)
 MF C22 H20 N2
 CI COM
 SR CA



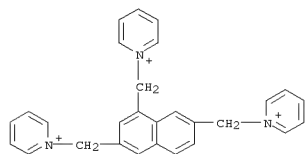
L50 ANSWER 172 OF 179 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 108750-50-1 REGISTRY
 ED Entered STN: 20 Jun 1987
 CN Pyridinium, 1,1',1''-[1,3,5-naphthalenetriyltris(methylene)]tris- (9CI) (CA INDEX NAME)
 MF C28 H26 N3
 CI COM
 SR CA



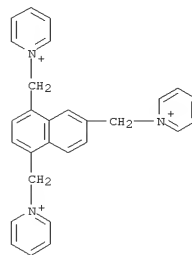
L50 ANSWER 173 OF 179 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 108750-48-7 REGISTRY
 ED Entered STN: 20 Jun 1987
 CN Pyridinium, 1,1',1''-[1,3,6-naphthalenetriyltris(methylene)]tris- (9CI) (CA INDEX NAME)
 MF C28 H26 N3
 CI COM
 SR CA



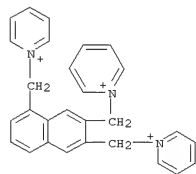
L50 ANSWER 174 OF 179 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 108750-46-5 REGISTRY
 ED Entered STN: 20 Jun 1987
 CN Pyridinium, 1,1',1''-[1,3,7-naphthalenetriyltris(methylene)]tris- (9CI)
 (CA INDEX NAME)
 MF C28 H26 N3
 CI CCM
 SR CA



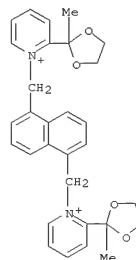
L50 ANSWER 175 OF 179 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 108750-44-3 REGISTRY
 ED Entered STN: 20 Jun 1987
 CN Pyridinium, 1,1',1''-[1,4,6-naphthalenetriyltris(methylene)]tris- (9CI)
 (CA INDEX NAME)
 MF C28 H26 N3
 CI CCM
 SR CA



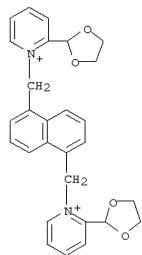
L50 ANSWER 176 OF 179 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 108750-42-1 REGISTRY
 ED Entered STN: 20 Jun 1987
 CN Pyridinium, 1,1',1''-[1,6,7-naphthalenetriyltris(methylene)]tris- (9CI)
 (CA INDEX NAME)
 MF C28 H26 N3
 CI CCM
 SR CA



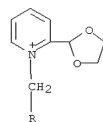
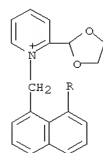
L50 ANSWER 177 OF 179 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 47774-43-6 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Pyridinium, 1,1'-[1,5-naphthalenediylbis(methylene)]bis[2-(2-methyl-1,3-dioxolan-2-yl)- (9CI) (CA INDEX NAME)
 MF C30 H32 N2 O4
 CI CCM



L50 ANSWER 178 OF 179 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 47745-26-6 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Pyridinium,
 1,1'-[1,5-naphthalenediylbis(methylene)]bis[2-(1,3-dioxolan-2-
 yl)- (9CI) (CA INDEX NAME)
 MF C28 H28 N2 O4
 CI CCM



L50 ANSWER 179 OF 179 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 47743-87-3 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Pyridinium,
 1,1'-[1,8-naphthalenediylbis(methylene)]bis[2-(1,3-dioxolan-2-
 yl)- (9CI) (CA INDEX NAME)
 MF C28 H28 N2 O4
 CI CCM
 LC STN Files: CASREACT



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COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	73.47	1576.56
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)		
CA SUBSCRIBER PRICE	0.00	-73.10

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FILE LAST UPDATED: 11 Feb 2010 (20100211/ED)
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USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

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FILE 'REGISTRY' ENTERED AT 10:59:40 ON 12 FEB 2010

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L2	STRUCTURE UPLOADED
L3	QUE L2 AND L1
L4	7 S L3
L5	3300 S L3 FULL
L6	SCREEN 1841
L7	STRUCTURE UPLOADED
L8	QUE L7 AND L6
L9	792 S L8 FULL SUB=L5
L10	2508 S L5 NOT L9
L11	SCREEN 1841
L12	STRUCTURE UPLOADED

L13 QUE L12 AND L11
L14 2018 S L13 FULL SUB=L5
L15 1282 S L5 NOT L14
L16 1078 S L15 AND L10
L17 983 S L16 AND CAPLUS/LC
L18 95 S L16 NOT L17

FILE 'CAPLUS' ENTERED AT 11:02:53 ON 12 FEB 2010
L19 714 S L17

FILE 'REGISTRY' ENTERED AT 11:03:41 ON 12 FEB 2010
L20 SCREEN 1841
L21 STRUCTURE UPLOADED
L22 QUE L21 AND L20
L23 0 S L22 FULL SUB=L17
L24 SCREEN 1841
L25 STRUCTURE UPLOADED
L26 QUE L25 AND L24
L27 491 S L26 FULL SUB=L17

FILE 'CAPLUS' ENTERED AT 11:05:23 ON 12 FEB 2010
L28 544 S L27

FILE 'REGISTRY' ENTERED AT 11:06:47 ON 12 FEB 2010
L29 SCREEN 1841
L30 STRUCTURE UPLOADED
L31 QUE L30 AND L29
L32 481 S L31 FULL SUB=L27
L33 10 S L27 NOT L32
L34 SCREEN 1841
L35 STRUCTURE UPLOADED
L36 QUE L35 AND L34
L37 2 S L36
L38 3850 S L36 FULL
L39 SCREEN 1841
L40 STRUCTURE UPLOADED
L41 QUE L40 AND L39
L42 1464 S L41 FULL SUB=L38

FILE 'CAPLUS' ENTERED AT 11:14:13 ON 12 FEB 2010
L43 626 S L42

FILE 'REGISTRY' ENTERED AT 11:14:58 ON 12 FEB 2010
L44 SCREEN 1006 AND 1841
L45 STRUCTURE UPLOADED
L46 QUE L45 AND L44
L47 843 S L46 FULL SUB=L42
L48 621 S L42 NOT L47
L49 442 S L48 AND CAPLUS/LC
L50 179 S L48 NOT L49

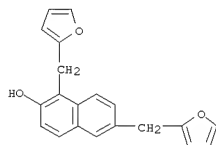
FILE 'CAPLUS' ENTERED AT 11:16:33 ON 12 FEB 2010

=> s 149

L51 176 L49

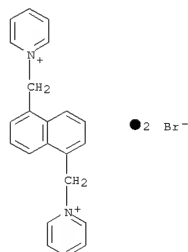
=> d ibib abs hitstr 170-176

L51 ANSWER 170 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1962:2287 CAPLUS
DOCUMENT NUMBER: 56:2287
ORIGINAL REFERENCE NO.: 56:436d-g
TITLE: Condensation products of furfuryl alcohol. VI.
Condensation products of furfuryl alcohol with
naphthols
AUTHOR(S): Takano, Kenzo
CORPORATE SOURCE: Hitachi Co.
SOURCE: Nippon Kagaku Zasshi (1960), 81, 337-40
CODEN: NPKZAZ; ISSN: 0369-5387
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB 1 (343 g.) and 504 g. α -naphthol (III) was heated 2 hrs. at
95-7° with 1.2 cc. N HCl and the mixture poured into 3 1.5% NaOH to
give 586 g. acidic part and 183 g. nonacidic part. The acidic part was
fractionally distilled to give 160 g. unreacted III, 143 g. low-boiling
part,
b1.5140-75°, and 56 g. high-boiling part, b2-4 190-225°
(with decomposition). The low-boiling part was crystallized from
ligroine to give
126 g. 4-furfuryl-1-naphthol (IV), m. 96.5-8°, and 8 g.
2-furfuryl-1-naphthol (V), m. 73-4°. The high-boiling part gave
III, IV, V, and an unidentified compound, C20H16O3, m. 87-8°. The
structures of IV and V were confirmed by oxidation after methylation,
4-methoxy-1-naphthoic acid and 2-methoxy-1-naphthoic acid being formed,
resp. In the case of β -naphthol (VI), 567 g. acidic part and 210 g.
nonacidic part were obtained. The acidic part was fractionated to give
178 g. unreacted VI, 98 g. low-boiling part, and 168 g. high-boiling
part.
The low-boiling part gave 6 g. 1-furfuryl-2-naphthol, b0.4 139-41°,
and 69 g. 6-furfuryl-2-naphthol (VII), b0.4 147-50°, m.
33-3.5°. The high-boiling part yielded VI, VII, unidentified oil
(C20H16O3), b1.5 213-16°, unidentified solid, m. 53-4°, and
another unidentified oil, b1.5 193-5°. The comps. of C20H16O3
composition may be difurfurylnaphthols and positions of furfuryl groups
are
suggested at 2 and 4 from III and 1 and 6 from VI.
IT 94465-17-5P, 2-Naphthol, 1,6-difurfuryl-(?)
RL: PREP (Preparation)
(preparation of)
RN 94465-17-5 CAPLUS
CN 2-Naphthalenol, 1,6-bis(2-furanylmethyl)- (CA INDEX NAME)

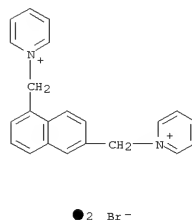


L51 ANSWER 171 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
150 cc. Et2O, the aq. layer extd. with 3 100-cc. portions of Et2O, and
the
combined dried exts. evapd. gave the 2,4-dinitrophenylhydrazones (IX) of
the V which was recrystd. from Me2SO; in this manner were prepd. the
following V (position of CHO groups, % yield and m.p. of V, % yield and
m.p. of VI or VII, % yield of VIII, and m.p. with decompn. of IX given):
1,3, 71, 124°, 93 (VI), 245°, 89, 327°, 1,4, 67,
131°, 98 (VII), 160°, 97, 337°, 1,5, 79, 192°,
97 (VI), above 300°, 89, 333°; 1,6, 67, 113° 74
(VII), 187°, 86, above 340°; 1,7, 73, 110°, 87 (VII),
184°, 89, 283°; 2,6, 75, 176°, 93 (VI), above
300°, 92, above 340°; 2,7, 87, 143°, 96 (VI),
243°, 92, 313°. The appropriate C10H5(CH2Br)3 (1.5 g.) and
1 cc. pyridine in 9 cc. MeOH treated with 1.9 g. NaClO4 in 9 cc. hot H2O,
the crude product converted in the usual manner to the crude pyridinium
perchlorate (X) and to the nitron (XI) of the corresponding C10H5(CHO)3
(XII), and the crude nitron cleaved with excess dil. H2SO4 and extd.
with
Et2O gave the XII, which was recrystd. from H2O; in this manner were
prepd. the following XII (position of CHO groups. % yield and m.p. of
XII,
% yield and m.p. of X, and, % yield of XI given): 1,3,5, 78, 175°
85, 268°, 86; 1,3,6, 83, 219°, 99, 234°, 57; 1,3,7,
91, 189°, 96, 231°, 61; 1,4,6, 99, 176°, 72,
213°, 80; 1,2,4, -, -, 92, 255°, -, 2,3,6, -, -, 88,
235°, -. The appropriate V or XII heated 3-5 hrs. with 10% excess
I, cooled, washed with MeOH, and recrystd. gave the corresponding bis- or
tris(benzo-2-thiazolyl)naphthalenes (positions of substituents, phys.
appearance, m.p., % yield, reaction time in hrs., and final reaction
temp.
given): 1,3, needles, 182° (dioxane), 78, 3, 145°; 1,4,
rectangles, 206.5° (EtCOMe), 46, 5, 170°; 1,5, needles,
227° (EtCOMe), 50, 3, 160°; 1,6, rods, 209°
(dioxane), 39, 4, 150°; 1,7, needles, 195° (EtCOMe), 64, 4,
150°; 2,3, needles, 201° (EtCOMe), 46, 8, 200° (an
unidentified material, m. 229.5°); 2,6, needles, 295°
(pyridine), 44, 4, 170°; 2,7, needles, 256° (EtCOMe), 38, 2,
140°; 1,3,5, needles, 276° (pyridine). -, 3, 140°;
1,3,6, needles, 308° (pyridine), -, 4, 140°; 1,3,7, needles,
317° (pyridine), -, 4, 140°; 1,4,6, needles, 264°
(pyridine-PhNO2), -, 6, 180°.
IT 114003-22-4 114003-23-5 114003-24-6
115212-96-9 115212-98-1 115213-00-8
(Derived from data in the 6th Collective Formula Index (1957-1961))
RN 114003-22-4 CAPLUS
CN 1,1'-(1,5-Naphthylenedimethylene)bis[pyridinium bromide] (6CI) (CA INDEX
NAME)

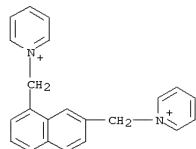
L51 ANSWER 171 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1959:34755 CAPLUS
DOCUMENT NUMBER: 53:34755
ORIGINAL REFERENCE NO.: 53:6209a-4,6210a
TITLE: Di- and trialdehydes of naphthalene
AUTHOR(S): Ried, Walter; Bodem, Heinz; Ludwig, Ursula;
Neidhardt,
Hehmut
CORPORATE SOURCE: Univ. Frankfurt, Germany
SOURCE: Chemische Berichte (1958), 91, 2479-84
CODEN: CHBEAM; ISSN: 0009-2940
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB The preparation of 8 dialdehydes and 4 trialdehydes of naphthalene from
the
corresponding side-chain brominated di- and trimethylnaphthalenes is
described. The reaction of these aldehydes with o-H2NC6H4SH (I)
yields bis- and tris(benzo-2-thiazolyl)naphthalenes. 1,4-C10H6(CH2Br)2
(II) (20 g.) in CHCl3 warmed with 18 g. (CH2)6N4 in CHCl3, the
precipitate
refluxed 2 hrs. with 600 cc. H2O and 56 g. concentrated HCl, the mixture
filtered
hot, adjusted with NaOAc to pH 4-5, and cooled deposited 7.5 g. crude
1,4-C10H6(CHO)2, which resinified largely during recrystn. The
appropriate C10H6(CH2Br)2 (1 mole) in refluxing dry CCl4 treated at
10-min. intervals with 2 moles dry N-bromosuccinimide in portions and
catalytic amts. of Bz2O2-[Me2C(CN)N]2, the mixture refluxed 20 min. and
filtered hot, the filtrate cooled, and the deposit recrystd. from CHCl3
or
CHCl3-petr. ether yielded the corresponding bromination product (% yield
and m.p. given): 1,2-BrCH2C10H6CHBr2 (III), 60, 136°; 1,6-isomer of
III, 42, 149°; 1,7-isomer of III, 37, 147°;
1,4-C10H6(CHBr2)2 (IV), 60, 178°, 1,5-isomer of IV, 75,
225°; 2,3-isomer of IV, 75, 161°; 2,6-isomer of IV, 52,
164°; 2,7-isomer of IV, 63, 125°; 1,8-isomer of IV, -
(small), 107°. The 1,3-isomer of II was recovered unchanged under
the same conditions. The appropriate C10H6(CHBr2)2 refluxed 5-7 hrs.
with
the equilibrium amount of NaOAc in glacial AcOH, the mixture treated
with a small
amount of H2O when it began to bump, a small amount of mineral acid
added, the
mixture poured into cold H2O, and the precipitate recrystd, gave the
corresponding
C10H6(CHO)2 (V). The appropriate C10H6(CH2Br)2 (5 g.), 3 g. pyridine,
and
20 cc. EtOH heated 15 min. on the water bath, cooled, and filtered gave
the corresponding bis(pyridinium bromide) (VI) of V which was recrystd.
from EtOH-Et2O; when the VI precipitated as an oil it was redissolved by
warming
and the solution treated with the calculated amount NaClO4 in hot H2O to
yield the
bis(pyridinium perchlorate) (VII). VI or VII (7 g.) in a little H2O
treated with 5 g. pure p-Me2NC6H4NO in 20 cc. pyridine and then with
stirring at room temperature with N NaOH to alkaline reaction (if the
product did
not crystallize after 10-12 hrs., the mixture was diluted with H2O), the
precipitated
crude nitron (VIII) (6 g.) shaken 15 min. with 200-300 cc. dilute H2SO4
and



RN 114003-23-5 CAPLUS
CN 1,1'-(1,6-Naphthylenedimethylene)bis[pyridinium bromide] (6CI) (CA INDEX
NAME)



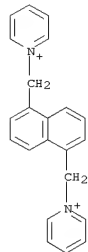
RN 114003-24-6 CAPLUS
CN 1,1'-(1,7-Naphthylenedimethylene)bis[pyridinium bromide] (6CI) (CA INDEX
NAME)

● 2 Br⁻

RN 115212-96-9 CAPLUS
CN 1,1'-(1,5-Naphthylenedimethylene)bis[pyridinium perchlorate] (6CI) (CA INDEX NAME)

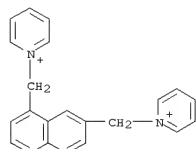
CM 1

CRN 115212-95-8
CMF C22 H20 N2



CM 2

CRN 14797-73-0
CMF C1 O4



CM 2

CRN 14797-73-0
CMF C1 O4



IT 108750-43-2P, Pyridinium,
1,1',1''-[1,6,7-naphthalenetriyltris(methylene)tris(-perchlorates)]
108750-45-4P, Pyridinium, 1,1',1''-[1,4,6-naphthalenetriyltris(methylene)tris(-perchlorates)] 108750-47-6P,
Pyridinium, 1,1',1''-[1,3,7-naphthalenetriyltris(methylene)tris(-perchlorates)] 108750-49-8P, Pyridinium,
1,1',1''-[1,3,6-naphthalenetriyltris(methylene)tris(-perchlorates)]
108750-51-2P, Pyridinium, 1,1',1''-[1,3,5-naphthalenetriyltris(methylene)tris(-perchlorates)]
RL: PREP (Preparation)
(preparation of)

RN 108750-43-2 CAPLUS
CN 1,1',1''-[1,6,7-Naphthalenetriyltris(methylene)]tris[pyridinium perchlorate] (6CI) (CA INDEX NAME)

CM 1

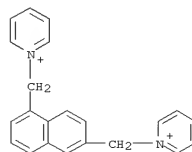
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CMF C28 H26 N3



RN 115212-98-1 CAPLUS
CN 1,1'-(1,6-Naphthylenedimethylene)bis[pyridinium perchlorate] (6CI) (CA INDEX NAME)

CM 1

CRN 115212-97-0
CMF C22 H20 N2



CM 2

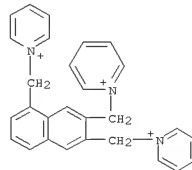
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CMF C1 O4



RN 115213-00-8 CAPLUS
CN 1,1'-(1,7-Naphthylenedimethylene)bis[pyridinium perchlorate] (6CI) (CA INDEX NAME)

CM 1

CRN 115212-99-2
CMF C22 H20 N2



CM 2

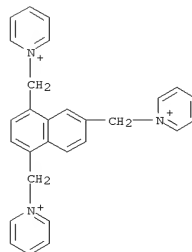
CRN 14797-73-0
CMF C1 O4



RN 108750-45-4 CAPLUS
CN 1,1',1''-[1,4,6-Naphthalenetriyltris(methylene)]tris[pyridinium perchlorate] (6CI) (CA INDEX NAME)

CM 1

CRN 108750-44-3
CMF C28 H26 N3

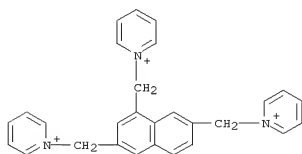


CM 2

CRN 14797-73-0
CMF C1 O4

RN 108750-47-6 CAPLUS
CN 1,1',1''-[1,3,7-Naphthalenetriyltris(methylene)]tris[pyridinium perchlorate] (6CI) (CA INDEX NAME)

CM 1

CRN 108750-46-5
CMF C28 H26 N3

CM 2

CRN 14797-73-0
CMF C1 O4

RN 108750-49-8 CAPLUS
CN 1,1',1''-[1,3,6-Naphthalenetriyltris(methylene)]tris[pyridinium perchlorate] (6CI) (CA INDEX NAME)

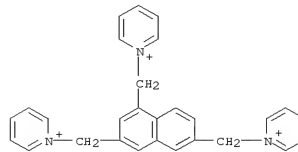
CM 1

CRN 108750-48-7
CMF C28 H26 N3

CM 2

CRN 14797-73-0
CMF C1 O4

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)

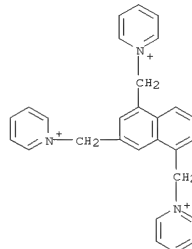


CM 2

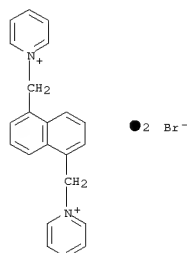
CRN 14797-73-0
CMF C1 O4

RN 108750-51-2 CAPLUS
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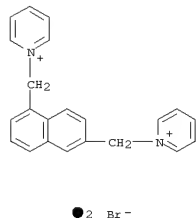
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CRN 108750-50-1
CMF C28 H26 N3

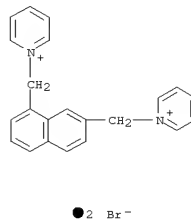
L51 ANSWER 172 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1959:34754 CAPLUS
DOCUMENT NUMBER: 53:34754
ORIGINAL REFERENCE NO.: 53:6208g-4,6209a
TITLE: Synthesis and rearrangement of 1-substituted thiocarbamylethylenimines to N-substituted derivatives of 2-amino-2-thiazoline. V. Chemistry of thiosemicarbazide and thiourea
AUTHOR(S): Tisler, M.
CORPORATE SOURCE: Univ. Ljubljana, Yugoslavia
SOURCE: Archiv der Pharmazie und Berichte der Deutschen Pharmazeutischen Gesellschaft (1958), 291, 457-63
CODEN: APBDAJ; ISSN: 0376-0367
JOURNAL
DOCUMENT TYPE: Unavailable
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB cf. C.A. 51, 12016h. In continuation of the study of substances with tuberculostatic activity, 1-substituted derivs. of thiocarbamylethylenimine were prepared These derivs. were prepared by the addition of the proper aromatic isothiocyanate to ethylenimine in ether solution
Rearrangement to the N-substituted derivative of 2-amino-2-thiazoline by heating 1 hr. with concentrated HCl gave the best yields; 1:1 H2SO4 and 1:1 H3PO4 gave over yields; MeONa and N2H4.H2O gave even lower yields accompanied by considerable polymerization. The following CH2.CH2.NCSNHR were prepared (R and m.p. given): m-tolyl, 88°; p-tolyl (I), 75°; p-methoxyphenyl, 99° p-chlorophenyl, 105-6°; m-chlorophenyl (II), 85°; 2,3-di-methylphenyl, 95°; 1-naphthyl, 91-2°; p-bromophenyl, 98°. The following S.CH2.CH2.N:CNHR were prepared (R, % yield and m.p. given): o-tolyl, 95, 105°; m-tolyl, 95, 118.5°; p-tolyl (III), 90, 131°; o-methoxyphenyl, 71, 126°; p-methoxyphenyl, 87, 127.5°; p-chlorophenyl, 78, 161°; m-chlorophenyl, 48, 109°; p-bromophenyl, 62, 155-6°; 2,3-dimethylphenyl, 95, 123°; 2,5-dimethylphenyl, 46, 145°; cyclohexyl, 45, 165°; benzyl, 80, 83°; 1-naphthyl, 82, 155°. I, II, and III at 10 γ/ml. showed almost complete arrest of Mycobacterium tuberculosis H37Rv. None of the compds. showed activity at 5, γ/ml.
IT 114003-22-4 114003-23-5 114003-24-6
115212-96-9 115212-98-1 115213-00-8
(Derived from data in the 6th Collective Formula Index (1957-1961))
RN 114003-22-4 CAPLUS
CN 1,1'-(1,5-Naphthylenedimethylene)bis[pyridinium bromide] (6CI) (CA INDEX NAME)



RN 114003-23-5 CAPLUS
 CN 1,1'-(1,6-Naphthylenedimethylene)bis[pyridinium bromide] (6CI) (CA INDEX NAME)

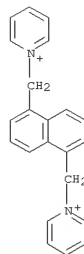


RN 114003-24-6 CAPLUS
 CN 1,1'-(1,7-Naphthylenedimethylene)bis[pyridinium bromide] (6CI) (CA INDEX NAME)



RN 115212-96-9 CAPLUS
 CN 1,1'-(1,5-Naphthylenedimethylene)bis[pyridinium perchlorate] (6CI) (CA INDEX NAME)

CM 1
 CRN 115212-95-8
 CMF C22 H20 N2

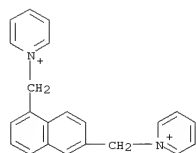


CM 2
 CRN 14797-73-0
 CMF C1 O4



RN 115212-98-1 CAPLUS
 CN 1,1'-(1,6-Naphthylenedimethylene)bis[pyridinium perchlorate] (6CI) (CA INDEX NAME)

CM 1
 CRN 115212-97-0
 CMF C22 H20 N2

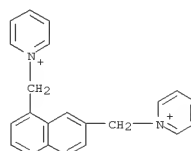


CM 2
 CRN 14797-73-0
 CMF C1 O4



RN 115213-00-8 CAPLUS
 CN 1,1'-(1,7-Naphthylenedimethylene)bis[pyridinium perchlorate] (6CI) (CA INDEX NAME)

CM 1
 CRN 115212-99-2
 CMF C22 H20 N2

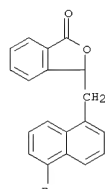


CM 2
 CRN 14797-73-0
 CMF C1 O4



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
 (1 CITINGS)

L51 ANSWER 173 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN
ACCESSION NUMBER: 1956:77766 CAPLUS
DOCUMENT NUMBER: 50:77766
ORIGINAL REFERENCE NO.: 50:14674e-g
TITLE: The preparation of cyclic phthalides and their conversion into derivatives of 1,3-indandione. I. Naphthylphthalide and some of its derivatives
AUTHOR(S): Hrnčiar, P.; Krasnec, L.; Furdik, M.
CORPORATE SOURCE: Univ. Komensky, Bratislava, Czech.
SOURCE: Chemické Zvesti (1956), 10, 12-18
CODEN: CHZVAN; ISSN: 0366-6352
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB A preparation of 3-(1-naphthylmethylene)phthalide (I) and its conversion into 2-(1-naphthyl)-1,3-indandione (II) by MeONa or EtONa in alkaline medium and described. II forms small golden-yellow scales, soluble in cold dioxane and cyclohexanone and in warm alc., m. 205°. Br (1 molar equivalent) displaces a H atom in the naphthalene ring of I, giving 3-(5-bromo-1-naphthylmethylene)phthalide (III), m. 226°. Another molar equivalent Br further brominates the double bond; III with MeONa in alkaline medium forms 2-(5-bromo-1-naphthyl)-1,3-indandione.
IT 1195655-73-2P
RL: SPN (Synthetic preparation); PRP (Properties); PREP (Preparation) (The preparation of cyclic phthalides and their conversion into derivatives of 1,3-indandione. I. Naphthylphthalide and some of its derivatives)
RN 1195655-73-2 CAPLUS
CN 1(3H)-Isobenzofuranone, 3-[(5-bromo-1-naphthalenyl)methyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

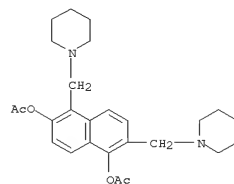
L51 ANSWER 174 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)
2-Methoxy-1-naphthaldehyde (20 g., m. 84-5°), 60 cc. EtOH, 1 cc. HOAc, and 2 g. Raney Ni heated with H at 100 atm. (cold) and 110° until 4 equivs. H absorbed, and the product crystd. from MeOH, gave 8.8 g.
g. 2-methoxy-1-methyl-5,6,7,8-tetrahydronaphthalene, m. 50-1°, the residue was sepd. by steam distn. into 5 g.
2-methoxy-1-methyl-1,2,3,4-tetrahydronaphthalene (volatile), b0.2 85-6°, nD20 1.5408, and 2.2 g.
1-hydroxymethyl-2-methoxy-5,6,7,8-tetrahydronaphthalene (X), needles or rhomboids from petr. ether or H2O, m. 67-8°.
2-methoxy-5,6,7,8-tetrahydro-1-naphthaldehyde (25 mg., prisms from MeOH, m. 63-4°, prepd. from the hydroxy aldehyde and Me2SO4) and 1 cc. 4M LiAlH4 in Et2O also gave X. 1-(1-Piperidylmethyl)-2-naphthol (XI) (12 g., m. 96°) in 60 cc. EtOH, hydrogenated 3 h. over 1.5 g. Cu-Cr2O3, and the product sepd. into acid and neutral fraction, gave, resp., 2.6 g. 1,2-Me(HO)C10H6 (XII), needles from H2O, m. 110-11°, and 4.3 g. 1-methyl-1,2,3,4-tetrahydro-2-naphthol (XIII), b0.1 101-2°, nD20 1.5587. XI hydrogenated over III, or over W-7 Raney Ni at 35 lb./sq. in., gave, resp., 77% and 67% XII. 1-Dimethylaminomethyl-2-naphthol (XIV) (40.2 g., m. 74°) in 80 cc. EtOH hydrogenated 1 h. over W-7 Raney Ni at 50-60° and 100 atm. (cold), gave 73% XII; hydrogenation 6 h. at 80-100° gave 66% XIII and 18% 1-methyl-5,6,7,8-tetrahydro-2-naphthol (XV), needles from petr. ether, m. 113°; addn. of HOAc to the hydrogenation mixt. gave 46% XIII and 35% XV. 1,2-(AcOCH2) (AcO)C10H6 (XVI) (2.8 g., plates from aq. MeOH, m. 76°, prepd. from XIV and Ac2O) hydrogenated 1.5 h. in EtOH over 1 g. 10% Pd-C, and the product heated 15 min. with 15 cc. 2N KOH in MeOH, gave 1 g.
g. XII. XVI (14 g.) in 85 cc. MeOH hydrogenated over 3 g. W-7 Raney Ni at 80-95° and 90 atm. (cold) until 3 equivs. of H absorbed, gave 64% XV and 18% XIII. XI (6 g.) in 50 cc. EtOH hydrogenated over W-7 Raney Ni 7 h. at 100-10° and 100 atm. (cold), and the product oxidized with CrO3 in HOAc and heated 4 h. with 50 cc. KOH in MeOH, gave 2.7 g. trans-octahydro-1-methyl-2-(1H)-naphthalene;
2,4-dinitrophenylhydrazones, m. 169-70° (from EtOH-EtOAc); semicarbazone, m. 206-8° (decompn.) (from aq. EtOH). Similarly, 2-piperidinomethyl-1-naphthol was converted to trans-octahydro-2-naphthyl-1(2H)-naphthalene; semicarbazone, m. 218-20° (decompn.) (from aq. EtOH); 2,4-dinitrophenylhydrazones, m. 237-8° (from EtOH-C6H6). Similar hydrogenation of II, extn. of an Et2O soln. of the product with 10% NaOH, and acidification of the aq. layer, gave 2.9 g. 3,4-dihydro-6-hydroxy-2,5-dimethyl-1(2H)-naphthalenone (XVII), b0.002 120°, yellow prisms from 35% MeOH, m. 180-2°; 2,4-dinitrophenylhydrazones, needles from EtOH-EtOAc, m. 260-3° (decompn.); acetate, prisms from 80% MeOH, m. 78-9°, benzoate, prisms from petr. ether, m. 102-3°. The Et2O soln. after extn. of XVII yielded small amts. of 1,6-dimethyl-5,6,7,8-tetrahydro-2-naphthol, needles from petr. ether, m. 95-6°, and 2,5-dimethyl-1,2,3,4-tetrahydro-1,6-naphthalene-diol, prisms from MeOH, m. 105-7°. I (8 g.) in 100 cc. EtOAc hydrogenated over 5 g. III 8 h. at 175° and 92 atm. (cold), gave 3.9 g.
3,4-dihydro-6-hydroxy-1(2H)-naphthalenone, tan prisms from 20% MeOH, m. 149-52°, Me ether, m. 75-7°. 5-Acetamido-2-naphthol (150 g.), 60 cc. 40% CH2O, 90 cc. piperidine, and 1500 cc. EtOH gave 185 g. 5-acetamido-1-(1-piperidylmethyl)-2-naphthol (XVIII), plates from Me(CH2)4OH, m. 198°; acetate, prisms from 50% EtOH, m.

L51 ANSWER 174 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN
ACCESSION NUMBER: 1956:40312 CAPLUS
DOCUMENT NUMBER: 50:40312
ORIGINAL REFERENCE NO.: 50:7763g-i, 7764a-i, 7765a-i, 7766a-e
TITLE: Substances related to the sterols. LIII. Stereospecific synthesis of a tricyclic ketone
AUTHOR(S): Cornforth, J. W.; Kauder, O.; Pike, J. E.; Robinson, Robert
CORPORATE SOURCE: Oxford Univ., UK
SOURCE: Journal of the Chemical Society (1955) 3348-61
CODEN: JCSOA9; ISSN: 0368-1769
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 50:40312
AB Studies were made to improve or circumvent the least favorable steps in total syntheses reported earlier (cf. C.A. 48, 2741h). The preparation of 3,4-dihydro-5-methoxy-1-methyl-2(1H)-naphthalenone from the di-Me compound, K, and MeI could not be accomplished in more than 50% yield, so the C-methylation of naphthalene derivs. by catalytic reduction of piperidinomethyl compds. was studied. Aqueous CH2O (7.5 cc. 40%) in 15 cc. EtOH added to 8.0 g. 1,6-naphthalenediol (I), and 10.2 g. piperidine in 40 cc. EtOH at 15-20° under N, gave 14.6 g. 2,5-bis(1-piperidylmethyl)naphthalene-1,6-diol (II), plates, m. 133°; diacetate (from II and AcCl in Me2CO), prisms from petr. ether, m. 118-19°. II (1 g.) and 8 cc. Ac2O heated 3 h. at 100° gave 0.6 g. 1,6-diacetoxy-2,5-bisacetoxymethylnaphthalene, prisms from aqueous MeOH, m. 82-3°. II (3 g.) and 1.5 g. 2% Pd-SrCO3 (III) in 90 cc. EtOH shaken 15 h. under H and the product containing 1,6,2,5-(HO)2C10H4Me2 (IV) methylated with Me2SO4 and NaOH gave 0.4 g. di-Me ether (V), cream-colored plates from MeOH, m. 88°. Reduction of II (3.5 g.) with 3 g. III and 1.8 g. (CO2H)2 in 70 cc. 50% MeOH allowed direct isolation of IV, 0.7 g., cream-colored prisms from 35% MeOH, m. 127-9°, orange with diazobenzenesulfonic acid, changed to deep purple with alkali. The III could be replaced by W-7 Raney Ni and H at 45 lb./sq. in. with similar results.
3,4-Dihydro-2-hydroxymethylene-6-methoxy-5-methyl-1(2H)-naphthalenone (VI) (3.7 g.), 4.5 g. MeI, and 2.5 g. freshly ignited powdered K2CO3 in 25 cc. Me2CO heated 15 h., 2 g. MeI and 10 cc. Me2CO then added, after 21 h. 25 cc. Et2O added, and the mixture filtered and concentrated gave 3,4-dihydro-2-formyl-6-methoxy-2,5-dimethyl-1(2H)-naphthalenone (VII), plates from petr. ether, m. 52-4°. The total crude VII kept 1/2 h. with 3 cc. HCl in 17 cc. 5% aqueous MeOH, the mixture made basic with KOH and extracted with Et2O, and the aqueous layer acidified gave 0.4 g. recovered VII, presumably by hydrolysis of its O-Me ether; the Et2O layer concentrated, and the residue heated 10 min. with 3 g. KOH in 30 cc. MeOH and acidified, gave 2.3 g. known 3,4-dihydro-6-methoxy-2,5-dimethyl-1(2H)-naphthalenone (VIII), plates or needles from aqueous MeOH, m. 114-15°. VIII (2 g.) and 0.25 g. S heated 1.5 h. at 220-5°, extracted with C6H6, the C6H6 extracted with 5% NaOH, and the aqueous layer acidified, gave 1,2,5,6-(HO)Me2(MeO)C10H4 (IX), yellowish prisms from petr. ether, m. 79-80°, methylated with Me2SO4 to give V.

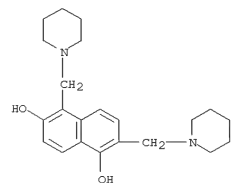
L51 ANSWER 174 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)
170-18°. Substitution of Me2NH for piperidine gave 37% Me2NH analog, prisms from EtOH, m. 193-4° (decompn.). XVIII (30 g.) and 9.0 g. (CO2H)2 in 600 cc. 50% MeOH hydrogenated over 20 g. III 3 h. at 40° and 1 atm., gave 19.4 g. 1,2,5-Me(HO)Ac(H)C10H5 (XIX), needles from aq. EtOH, m. 195-6°. XIX (23.7 g.), 100 cc. concd. HCl, 20 cc. H2O and 50 cc. EtOH refluxed 3 h. and neutralized with NH3, gave 17.5 g. 1,2,5-Me(HO) (H2N)C10H5 (XX), yellow needles from aq. EtOH, m. 186-7°, O,N-dibenzoyl deriv., needles from EtOH, m. 231-2°. 5-Amino-2-naphthol (10 g., m. 189-90°) and 130 cc. 40% NaHSO3 stirred 15 h. at 95°, 50 g. NaOH in 40 cc. H2O added, the mixt. boiled 2 h., excess HCl added, and the mixt. boiled 1 h., gave 7.1 g. I, prisms from C6H6, m. 137-8°. Similarly, XX was converted to 1,2,5-Me(HO)2C10H5, in 85% yield, needles from H2O, m. 163-4°; di-Me ether, plates from EtOH, m. 84-5°. Na (5 g.) added to 5-acetamido-2-methoxynaphthalene (9.6 g., m. 143-4°), 30 cc. MeOH, 30 cc. Et2O and 200 cc. liq. NH3, and the mixt. hydrolyzed and reacylated with 3 cc. Ac2O and 10 cc. pyridine, gave 5-acetamido-2-methoxy-3,4-dihydronaphthalene, needles from EtOH, m. 190-2°, hydrolyzed with 2N H2SO4 to 2.1 g. 3,4-dihydro-5-acetamido-2(1H)-naphthalenone, plates from H2O; semicarbazone, needles from EtOH, m. 233°. 1,2,5-Me(MeO) (AcOH)C10H5 (XXI) (64 g., from XIX and Me2SO4, laths from EtOH, m. 210-11°) refluxed 3 h. with 400 cc. concd. HCl, 100 cc. H2O, and 100 cc. EtOH, and the mixt. neutralized, gave 52 g. 1,5,6-(H2N)Me(MeO)C10H5 (XXI), needles from C6H6, m. 127-8°. XXI in the Bucherer reaction gave 92% 1,5,6-(HO)Me(MeO)C10H5 (XXII), needles from C6H6, m. 143-4°; acetate, plates from EtOH, m. 145-7°. Na (24.7 g.) added during 0.5 h. to 62 g. XXII in 800 cc. liq. NH3 and 64 cc. EtOH, and the mixt. hydrolyzed with aq. HCl, gave 27.3 g. 3,4-dihydro-5-hydroxy-1-methyl-2(1H)-naphthalenone (XXIII), m. 127-9°, semicarbazone, needles from EtOH, m. 170-1°; benzoate, needles from EtOH, m. 140-1°. XXIII (25 g.) in 150 cc. dry EtOH added to MeI.Et2N(CH2)2Ac [from 21.55 g. Et2N(CH2)2Ac and 9.7 cc. MeI] at 0° under N, followed by 16.0 g. K in 150 cc. EtOH, after 2 h. the mixt. boiled 30 min., and 250 cc. 2N H2SO4 and 500 cc. H2O added, gave 16.9 g. 4b-methyl-4b,5,6,7,9,10-hexahydronaphthanren-1-ol-7-one (XXIV), m. 212-13° (from EtOH); Me ether (XXV), m. 118-20° (from petr. ether). XXV (20 g.), 30 cc. (CH2OH)2, and 400 cc. C6H6 distd. with stirring 1 h., 300 mg. p-MeC6H4SO3H added and the soln. distd. 4 h., washed with NaHCO3, and concd., gave 15.7 g. 7,7-ethylenedioxy-1-methoxy-4b-methyl-4b,5,6,7,8,10-hexahydronaphthanene (XXVI), prisms from MeOH, m. 110-11°. Similarly XXIV formed the 1-hydroxy analog of XXVI, yellow needles from EtOH, m. 213-14°. XXVI (1 g.) in 20 cc. EtOAc hydrogenated 4 h. over 120 mg. PtO2 at 15° and 5 atm., gave 600 mg. ethylene glycol ketal of 1-methoxy-4b-methyl-4b,5,6,7,8,9,10-octahydronaphthanren-7-one (XXVIIA, cis junction between alicyclic rings), prisms from MeOH, m. 84-5°, hydrolyzed with HCl-EtOH to XXVIIA, prisms from EtOH, m. 121-2°. XXV (21 g.) in 420 cc. dioxane-ether (1:1) added slowly to 1.9 g. Li in 1 l. liq. NH3, after 15 min. 30 g. NH4Cl added, the NH3 evapd., 500 cc. H2O added, and the product extd., gave 13.55 g. XXVIIB (trans junction between alicyclic rings), needles from EtOH, m. 156-8°; oxime, prisms from petr. ether, m. 187-8°. XXV (1 g.) in 40 cc. dioxane-ether (1:1) added slowly to 10 cc. MeOH and 250 cc. liq. NH3, 400 mg. Li added during 15 min., 5 g. NH4Cl added, and the product sepd., chromatographed in C6H6 on 30 g.

L51 ANSWER 174 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)
Al2O3, and eluted with ether, gave 1-methoxy-4b-methyl-4b,5,6,7,8,9,10-octahydrophenanthren-7b-ol (trans ring junction), needles from petr. ether, m. 117.5-18.5°; also obtained by LiAlH₄ redn. of XXVIIIB. The acetate of XXIV (15.45 g., rhombs from aq. MeOH, m. 104-4.5°) in 300 cc. dioxane-ether (1:1) added to 1.3 g. Li in 1 l. liq. NH₃, 0.1 g. addnl. Li added until blue color persisted, and the product isolated, gave 8.57 g. 4b-methyl-4b,5,6,7,8,9,10-octahydrophenanthren-1-ol-7-one (XXVIII) (trans ring junction), yellow powder from EtOH, m. 209-11°; acetate, m. 108-10° (from petr. ether); methylation gave XXVIIIB. The ethylene glycol ketal of XXVIIIB (6.5 g., plates from EtOH, m. 132-3°), 13 g. KOH, and 70 cc. MeOH, heated in an autoclave 5 h. at 180-90°, 200 cc. H₂O added, the mixt. extd. with petr. ether, the aq. layer satd. with CO₂, and the pptd. product chromatographed in C₆H₆-Et₂O (1:1) on Al₂O₃, gave 4.1 g. ethylene glycol ketal (XXIX) of XXVIII, prisms from MeOH, m. 179-80°; acetate, needles from MeOH, m. 154-5°. XXIX was prepd. directly from XXVIII in 80% yield. XXIX (5.0 g.) and 4 drops aq. 30% NaOH in 50 cc. EtOH hydrogenated over 1 g. Raney Ni at 170° and 140 atm., and the product oxidized with CrO₃-pyridine complex, gave 3.7 g. 7-ethylene glycol ketal (XXX) of 4b-methylperhydrophenanthrene-1,7-dione (trans-anti-trans) (XXXI), laths from MeOH, m. 113-14.5°, hydrolyzed with HCl in Me₂CO to XXXI, plates from petr. ether, m. 81-2°; bis(ethylene glycol ketal), needles from petr. ether, m. 150-2°. Solid NaOMe (from 166 mg. Na), 0.85 g. (CO₂Me)₂, and 4 cc. C₆H₆ refluxed 10 min. under N, 1 g. XXX in 6 cc. C₆H₆ added, after 4 h. at room temp. 15 cc. H₂O added, the C₆H₆ layer extd. with 2N NaOH, and the aq. exts. satd. with CO₂ and extd. with CHCl₃, gave 300 mg. 7,7-ethylenedioxy-1-hydroxy-4b-methyl-4,4a,4b,5,6,7,8,9,10-decahydro-A²(3H),α-phenanthrylideneγ-glycolic lactone, rhombs from MeOH, m. 220-2° (decompn.); α-Me ether, needles from MeOH, m. 170-2°. XXX (1 g.), 6.5 cc. Me₂CO₃, and 2 drops MeOH added to 0.21 g. NaH in 8 cc. Et₂O, the mixt. stirred 16 h. with five 1/4-in. ball-bearings and 2 g. powd. glass, 10 cc. H₂O and 10 cc. Et₂O added, the mixt. filtered, the solid suspended in aq. NaH₂PO₄ and extd. with CHCl₃, and the Et₂O filtrate washed with NaH₂PO₄, combined with the CHCl₃ exts., dried and cond., gave 700 mg. Me 7,7-ethylenedioxy-4b-methyl-1-oxoperhydrophenanthrene-2-carboxylate (XXXII), needles from MeOH, m. 124-6°, blue color with FeCl₃. XXXII (2.2 g.) in 18 cc. C₆H₆ added to 1.43 g. Na in 33 cc. MeOH, the mixt. refluxed 0.5 h. and cooled, 9 cc. MeI added in two portions during 45 min., after 30 min. the mixt. refluxed 45 min., and the product isolated, gave 1.45 g. 2-Me deriv. of XXXII, prisms from Et₂O, m. 141-2.5°, hydrolyzed with HCl in Me₂CO to Me 2,4b-dimethyl-1,7-dioxoperhydrophenanthrene-2-carboxylate (XXXIII), rhombs from petr. ether, m. 127-9°. The preferred route of synthesis is by the stages: XVIII, XIX, XIXA, XXI, XXII, XXIII, XXIV, XXVIII, XXIX, XXX, XXXII, XXXIII.
IT 857835-19-9P, 1,6-Naphthalenediol, 2,5-bis(piperidinomethyl)-, diacetate 857835-22-4P, 1,6-Naphthalenediol, 2,5-bis(piperidinomethyl)-
RL: PREP (Preparation)
RN (preparation of)
857835-19-9 CAPLUS
CN 1,6-Naphthalenediol, 2,5-bis(1-piperidinylmethyl)-, 1,6-diacetate (CA INDEX NAME)

L51 ANSWER 174 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)



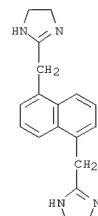
RN 857835-22-4 CAPLUS
CN 1,6-Naphthalenediol, 2,5-bis(1-piperidinylmethyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

L51 ANSWER 175 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN
ACCESSION NUMBER: 1955:20099 CAPLUS
DOCUMENT NUMBER: 49:20099
ORIGINAL REFERENCE NO.: 49:3983b-g
TITLE: Bifunctional theophylline derivatives and corresponding imidazolines
AUTHOR(S): Hager, Geo. P.; Kaiser, Carl
CORPORATE SOURCE: Univ. of Maryland, Baltimore
SOURCE: Journal of the American Pharmaceutical Association (1912-1977) (1954), 43, 148-51
CODEN: JPHAA3; ISSN: 0003-0465
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 49:20099
AB A number of bifunctional analogs of priscoine (2-benzyl-2-imidazoline) were prepared and preliminary studies indicated the compds. had hypotensive action but only in doses inhibitory to respiration. Several bifunctional analogs of 8-benzyltheophylline were also prepared and found to have vasodepressor activity resembling the monofunctional type. A new method for preparing 8-substituted theophylline derivs. is described. The following (p-YCH₂C₆H₄)₂X (I) (Y = 2-imidazolin-2-yl) are prepared: (X, % yield, m.p. given): O(CH₂)₃O, 76, 198-200° (decomposition), di-HCl salt, m. 248-50° (decomposition); O(CH₂)₅O, 80, 164-5° (decomposition), di-HCl salt, m. 209-10.5°; CH₂CH₂, 94, m. 198-200° (decomposition); and in the same series 1,5-bis(2-imidazolin-2-ylmethyl)naphthalene, 97% yield, m. 247-8° (decomposition). The above compds. were prepared by fusion of the appropriate dinitriles with ethylenediamine p-toluenesulfonate (II) of which the following is representative. A mixture of 6.1 g. (0.02 mole) 1,3-bis(4-cyanomethylphenoxy)propane and 11.6 g. (0.05 mole) I was heated 1 hr. at 210°, the product dissolved in H₂O, the solution made alkaline, extracted with CHCl₃, the CHCl₃ distilled, and the residue recrystd. from 95% EtOH to give 6 g. (76%) 1,3-bis[4-(2-imidazolyl-methyl)phenoxy]propane. The following I (Y = 1,3-dimethylxanthin-8-yl) were prepared (X, % yield, m.p. given): O, -, above 300°; O(CH₂)₃O (III), 10, above 300° (di-K salt, m. above 300°); O(CH₂)₅O (IIa), 19, above 300° [a preparation which also gave 4-[4-(1,3-dimethylxanthin-8-ylmethyl)phenoxy]pentamethyleneoxy]phenylacetic acid, m. about 245° (decomposition)]. The above compds. were prepared by fusion of the appropriate dicarboxylic acid with 1,3-dimethyl-5,6-diaminouracil (IV) followed by cyclization with aqueous alkali. For III and IIa, the required dicarboxylic acids were obtained by hydrolysis of bis(4-cyanomethylphenoxy)propane and of bis(4-cyanomethylphenoxy)pentane, 70%, m. 216-18° (from 95% EtOH), and 76%, m. 184-5°, resp. Because of the tendency of IV to decompose at the fusion temperature (about 200°), the complete reaction was accomplished better by refluxing a solution of the starting materials in POCl₃. A mixture of 6.8 g. (0.05 mole) PhCH₂CO₂H, 8.5 g. (0.05 mole) IV, and 10 cc. POCl₃ was refluxed 30 min., the excess POCl₃ distilled in vacuo, the residue mixed with 20 cc. H₂O, the solid dissolved in aqueous NaOH, precipitated with CO₂, and recrystd. to give 5.1 g. (40%) 8-benzyltheophylline, white needles, m. 291° (from 70% AcOH). A similar reaction with EtOH

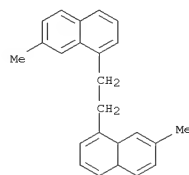
L51 ANSWER 175 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)
gave 39% 8-phenyltheophylline, yellow cryst. solid, m. above 360°, identified by methylation to 8-phenylcaffeine, m. 185-6°.
IT 860721-77-3P, 2-Imidazoline, 2,2'-(1,5-naphthylenedimethylene)di-
RL: PREP (Preparation)
(preparation of)
RN 860721-77-3 CAPLUS
CN 2-Imidazoline, 2,2'-(1,5-naphthylenedimethylene)di- (5CI) (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

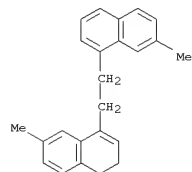
L51 ANSWER 176 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN
ACCESSION NUMBER: 1936:34185 CAPLUS
DOCUMENT NUMBER: 30:34185
ORIGINAL REFERENCE NO.: 30:44831,4484a-i
TITLE: Polyterpenes and polyterpenoids. CIV. Synthesis of
3,9,10-trimethylpicene and 3,8-dimethylpicene
AUTHOR(S): Ruzicka, L.; Morgeli, E.
SOURCE: Helvetica Chimica Acta (1936), 19, 377-86
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 30:34185
AB The dehydrogenation of various triterpenes gives a hydrocarbon (I), m.
about 306°. Its composition may be expressed as C₂₄H₁₈, C₂₅H₂₀ or
C₂₆H₂₂ and it may accordingly be a di-, tri- or tetramethylpicene. Since
the findings of degradation analyses have led to doubtful conclusions and
since a knowledge of the structure of I is of some importance, an attempt
has been made to solve the problem by synthesis. A preliminary test by
adsorption spectra comparisons showed the probable validity of the
assumption that I was a Me derivative of picene. A new synthesis was
devised,
consisting in the condensation of the Grignard compound of
β-ClO₈H₇CH₂CH₂Cl with α-tetralone, dehydrogenation of the
resulting hydrocarbon to a dinaphthylethane and cyclization with AlCl₃ in
CS₂ at room temperature to picene. Synthesis of 3,9,10-trimethylpicene
(II)
and
3,8-dimethylpicene (III) gave products which differed from I. From
comparisons of absorption spectrum curves it is probable that I is a
homologous-picene. The condensation product of toluene and succinic
anhydride was reduced to MeC₆H₄(CH₂)₃CO₂H, converted into the chloride,
b₁₁ 132°, and cyclized by treatment with AlCl₃ in CS₂ to 90% yields
of 7-methyl-1-keto-1,2,3,4-tetrahydronaphthalene (IV), b₉ 131-2°.
The dehydrogenation of 10 g. of IV with 4 g. of Pd black at 300-20°
for 1.5 hrs. yielded 6 g. of 7-methyl-1-hydroxynaphthalene (V), b₁₀
155-6°, m. 110-11°. A mixture of 10 g. of V with 15 g. of
freshly prepared (NH₄)₂SO₃, 15 cc. of NH₄OH (d. 0.910) and 30 cc. of H₂O
was
heated in a bomb-tube at 160-70° for 20 hrs. The reaction product
was extracted with Et₂O, freed from unchanged V with dilute Na₂CO₃ and
shaken
out with dilute HCl, yielding 8 g. of 7-methyl-1-aminonaphthalene, b₁₀
162°, m. 58-9°; Ac derivative, C₁₃H₁₈NO, m. 178-9°. A
solution of 27 g. of the amino compound in HCl at 90° was diazotized
with 12 g. of NaNO₂ in 20% solution. Addition of the diazotized solution
to a
previously cooled KBr solution containing 116 g. of Hg(NO₃)₂
precipitated a yellow
complex salt, (MeC₁₀H₆N₂Br)₂HgBr₂, which, on heating with 1.5 times its
weight of finely powdered KBr, yielded 24 g. of
7-methyl-1-bromonaphthalene, b₁₂
144.5-6.0°, picrate, m. 101-2°. The addition of a solution of 7
cc. of ethylene oxide in 50 cc. of Et₂O to a Grignard solution prepared
from 35
g. of the Br compound, 7.6 g. of activated Mg and 100 cc. of Et₂O and
diluted
with 100 cc. of dry Et₂O and the decomposition of the reaction mixture
after a 12
hrs. standing in a cooling mixture gave 15 g. of
β-(7-methyl-1-naphthyl)ethanol, b_{0.5} 154-7° (p-nitrobenzoate,
C₂₀H₁₇NO₄, m. 118-19°), converted by heating with SO₂Cl₂ in PhNMe₂

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into the corresponding chloride (VI), b_{0.4} 124-5°. The
condensation product from β-(2,3-dimethylphenyl)ethyl bromide and
CH₂(CO₂Et)₂ was saponi. and decarboxylated to yield
γ-(2,3-dimethylphenyl)butyric acid whose chloride, b₁₀
144-6°, was cyclized in CS₂ in the presence of AlCl₃ to
1,2-dimethyl-5-keto-5,6,7,8-tetrahydronaphthalene (VII), C₁₂H₁₄O, b₈
154-8°, m. 61-2°. A soln. of 7 g. of VII in 40 cc. of Et₂O
was added dropwise to a Grignard soln. contg. 12.3 g. of VI, 4.3 g. of
activated Mg and 40 cc. of Et₂O. Boiling for 12 hrs. and the customary
decompn. and working up gave 10.2 g. of a viscous oil, b_{0.3} 215.7°,
which on dehydrogenation over Pd black produced
α-(7-methyl-1-naphthyl)-β-(5,6-dimethyl-1-naphthyl)ethane
(VIII), C₂₅H₂₄, b_{0.2} 225-30°, m. 108.5-9.5°; picrate,
C₃₇H₃₀N₆O₁₄, m. 167-8°. A soln. of 3 g. of VIII in 30 cc. of CS₂
was treated with 6 g. of AlCl₃ and shaken for 3 days. After decompn.
with
ice and HCl and removal of the CS₂, the washed residue was sublimed at
270° and 0.1 mm. Recrystn. from pyridine gave II, C₂₅H₂₀, m.
308-10°, which gave a m. p. depression of 10° when mixed
with I prep. by the dehydrogenation of gypsogenin. The reaction product
from a Grignard soln. prep. from 7 g. of VI and an Et₂O soln. of 5 g. of
IV produced, as a highly viscous oil, 7 g. of
α-(7-methyl-1-naphthyl)-β-(7-methyl-3,4-dihydro-1-
naphthyl)ethane, b_{0.2} 198-205°, dehydrogenated over Pd black to
α, β-bis(7-methyl-1-naphthyl)ethane (IX), C₂₄H₂₂, b_{0.8}
220-5°, m. 122.5-3.5°. A mixt. of 3 g. of IX, 30 cc. of CS₂
and 6 g. of AlCl₃ was shaken vigorously for 3 days and after decompn. was
worked up as above, yielding III, m. 293-4°.
IT 1195525-75-7P
RL: SPN (Synthetic preparation); PRP (Properties); RCT (Reactant); PREP
(Preparation); RACT (Reactant or reagent)
(Polyterpenes and polyterpenoids. CIV. Synthesis of
3,9,10-trimethylpicene and 3,8-dimethylpicene)
RN 1195525-75-7 CAPLUS
CN Naphthalene,
4a,8a-dihydro-7-methyl-1-[2-(7-methyl-1-naphthalenyl)ethyl]-
(CA INDEX NAME)



IT 859187-21-6P, Ethane, 1-(3,4-dihydro-7-methyl-1-naphthyl)-2-(7-
methyl-1-naphthyl)-
RL: PREP (Preparation)
(preparation of)
RN 859187-21-6 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

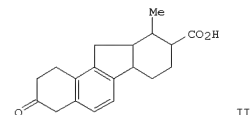
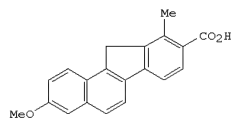
L51 ANSWER 176 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)



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RECORD
(2 CITINGS)

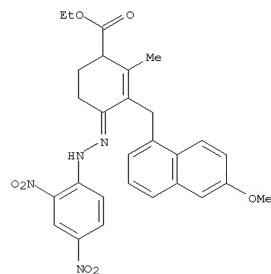
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L51 ANSWER 140 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1982:423424 CAPLUS
 DOCUMENT NUMBER: 97:23424
 ORIGINAL REFERENCE NO.: 97:4093a,4096a
 TITLE: Syntheses of 3-methoxy-10-methyl-11H-benzo[a]fluorene and (±)-9β-carboxy-10β-methyl-3-oxo-1,2,3,4,6b,7,8,9,10,10a-decahydro-11H-benzo[a]fluorene
 AUTHOR(S): Dutt, Sachchidananda; Banerjee, Amalendu; Karmarkar, Tapan K.
 CORPORATE SOURCE: Dep. Chem., Jadavpur Univ., Calcutta, 700 032, India
 SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1982), 21B(3), 192-6
 CODEN: IJCSDB; ISSN: 0376-4639
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI

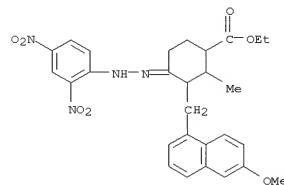


AB The title comps. I and II, an etiojervane derivative, were synthesized starting from 1-(bromomethyl)-6-methoxynaphthalene.
 IT 82214-80-0P 82214-81-1P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 82214-80-0 CAPLUS
 CN 2-Cyclohexene-1-carboxylic acid, 4-[2-(2,4-dinitrophenyl)hydrazinylidene]-3-[(6-methoxy-1-naphthalenyl)methyl]-2-methyl-, ethyl ester (CA INDEX NAME)

L51 ANSWER 140 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 82214-81-1 CAPLUS
 CN Cyclohexanecarboxylic acid, 4-[2-(2,4-dinitrophenyl)hydrazinylidene]-3-[(6-methoxy-1-naphthalenyl)methyl]-2-methyl-, ethyl ester (CA INDEX NAME)

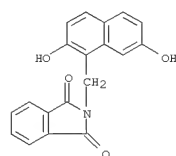


L51 ANSWER 141 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1982:201333 CAPLUS
 DOCUMENT NUMBER: 96:201333
 ORIGINAL REFERENCE NO.: 96:33211a,33214a
 TITLE: Liquid, stable pigment preparations and their use
 INVENTOR(S): Fechner, Wolf Dieter; Kranz, Joachim; Polster, Rudolf
 PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.
 SOURCE: Eur. Pat. Appl., 33 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 43932	A1	19820120	EP 1981-104687	19810619
EP 43932	B1	19840418		
R: CH, DE, FR, GB, IT				
DE 3026697	A1	19820218	DE 1980-3026697	19800715
US 4350534	A	19820921	US 1981-279778	19810702
DK 8103136	A	19820116	DK 1981-3136	19810714
DK 151896	B	19880111		
DK 151896	C	19880606		
AU 8172848	A	19820121	AU 1981-72848	19810714
AU 537493	B2	19840628		
JP 57049665	A	19820323	JP 1981-108937	19810714
PRIORITY APPLN. INFO.: DE 1980-3026697 A 19800715				

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
 OTHER SOURCE(S): MARPAT 96:201333
 AB Title pigment comps., imparting high gloss and transparency to coatings, consist of (a) finely divided α- or β-form copper phthalocyanine [147-14-8](CuPc) or indanthrone [81-77-6], (b) a C6-18-alkylbenzenesulfonic acid, (c) CuPc(CH2NRR1)n (R,R1 = H, Cl-8 alkyl; n = 1-4), (d) a Mannich condensation product of 2-naphthol (optionally containing 1 or 2 addnl. OH groups, HCHO, and primary or secondary amines, and (e) one or more organic solvents. The b:c:d ratio is from 1:1:1 to 2.5:1.25:1 by weight. A typical composition was prepared by mixing 70:30 C9-19-alkylbenzene-ETOCCH2CH2OAc 60, CuPc(CH2NHET)3 [61103-22-8] 5, 1-(1-piperidinylmethyl)-2-naphthol [5342-95-0] 5, and finely divided β-form CuPc (0.1 μm) 20 parts and then adding 10 parts dodecylbenzenesulfonic acid [27176-87-0] while stirring. The fluid composition had a flow time of 11 s (DIN cup, 6 mm die).
 IT 81653-10-3
 RL: USES (Uses)
 (copper phthalocyanine pigment comps. containing, liquid, for coatings)
 RN 81653-10-3 CAPLUS
 CN 1H-Isoindole-1,3(2H)-dione, 2-[(2,7-dihydroxy-1-naphthalenyl)methyl]-
 (CA INDEX NAME)

L51 ANSWER 141 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

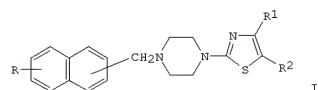


OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
 (3 CITINGS)

L51 ANSWER 142 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1981:481024 CAPLUS
 DOCUMENT NUMBER: 95:81024
 ORIGINAL REFERENCE NO.: 95:13715a,13718a
 TITLE: Naphthalene derivatives
 INVENTOR(S): Regnier, Gilbert; Canevari, Roger; Poignant, Jean
 PATENT ASSIGNEE(S): Claude
 Science Union et Cie., Societe Francaise de Recherche
 Medicale, Fr.
 SOURCE: Can., 13 pp.
 CODEN: CAXXA4
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

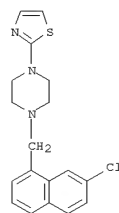
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 1099718	A1	19810421	CA 1977-278251	19770512
PRIORITY APPLN. INFO.:			CA 1977-278251	A 19770512

GI

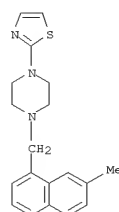


AB (Thiazolylpiperazinylmethyl)naphthalenes I (R = H, halo, alkyl, alkoxy; R1, R2 = H, Cl-5 alkyl), useful as nervous system stimulants, antiparkinsonism and cardiovascular agents, were prepared Thus, 1-(2-naphthylmethyl)-4-(2-thiazolyl)piperazine was prepared by the condensation of a) 2-bromomethylnaphthalene and 1-(2-thiazolyl)piperazine, b) 1-(2-naphthylmethyl)piperazine and 2-chlorothiazole, and c) β -naphthaldehyde and 1-(2-thiazolyl)piperazine followed by hydrogenation.
 IT 64965-97-5P 64965-98-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 64965-97-5 CAPLUS
 CN Piperazine, 1-[(7-chloro-1-naphthalenyl)methyl]-4-(2-thiazolyl)- (CA INDEX NAME)

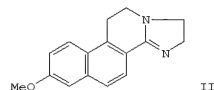
L51 ANSWER 142 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 64965-98-6 CAPLUS
 CN Piperazine, 1-[(7-methyl-1-naphthalenyl)methyl]-4-(2-thiazolyl)- (CA INDEX NAME)

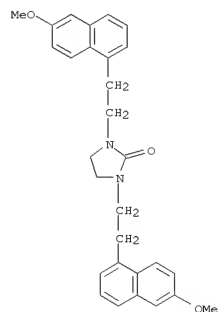


L51 ANSWER 143 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1980:550460 CAPLUS
 DOCUMENT NUMBER: 93:150460
 ORIGINAL REFERENCE NO.: 93:23991a,23994a
 TITLE: Synthesis in the diazasteroid group. XIV. Synthesis of the 13,15-diazasteroid system
 AUTHOR(S): Matoba, Katsuhide; Imai, Toshio; Nishino, Yoshie; Takahata, Hiroki; Hirai, Yoshiro; Yamazaki, Takao
 CORPORATE SOURCE: Fac. Pharm. Sci., Toyama Med. Pharm. Univ., Sugitani, 930-01, Japan
 SOURCE: Chemical & Pharmaceutical Bulletin (1980), 28(6), 1810-13
 CODEN: CPBTAL; ISSN: 0009-2363
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB A 13,15-diazasteroid was prepared from 2-(6-methoxynaphthyl)ethyl tosylate and ethylene urea (I) in 24.3% overall yield. The tosylate formed a 1:1 adduct with I in 44% yield, using 2 molar equivalents of I in the presence of NaH in C6H6. The adduct cyclized to give the hydrochloride of the diazagonapentaene II in 69.7% yield by prolonged heating in the presence of P2O5 in POCl3. The hydrochloride was neutralized to give II in 79.1% yield by treatment with KOH.
 IT 74996-73-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 74996-73-9 CAPLUS
 CN 2-Imidazolidinone, 1,3-bis[2-(6-methoxy-1-naphthalenyl)ethyl]- (CA INDEX NAME)

L51 ANSWER 143 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L51 ANSWER 144 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1980:24245 CAPLUS
DOCUMENT NUMBER: 92:24245
ORIGINAL REFERENCE NO.: 92:4107a,4110a
TITLE: Intermediate products for manufacturing azo dyes
INVENTOR(S): Hurter, Rudolf
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Ger. Offen., 42 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2913102	A1	19791004	DE 1979-2913102	19790402
DE 2913102	C2	19870226		
CH 636080	A5	19830513	CH 1978-3537	19780403
US 4288363	A	19810908	US 1979-23514	19790323
GB 2018749	A	19791024	GB 1979-11478	19790402
GB 2018749	B	19830112		
FR 2421879	A1	19791102	FR 1979-8271	19790402
FR 2421879	B1	19840817		
GB 2094331	A	19820915	GB 1981-19034	19790402
GB 2094331	B	19830223		
DE 2954435	C2	19891221	DE 1979-2954435	19790402
JP 54132561	A	19791015	JP 1979-39382	19790403
JP 61004392	B	19860208		
US 4360460	A	19821123	US 1980-217277	19801216
GB 2100742	A	19830106	GB 1981-19035	19810619
GB 2100742	B	19830706		
CH 640555	A5	19840113	CH 1983-894	19830217
CH 641194	A5	19840215	CH 1983-895	19830217
JP 60168764	A	19850902	JP 1984-202114	19840928
JP 02044862	B	19901005		
JP 60168763	A	19850902	JP 1984-202115	19840928
JP 02044863	B	19901005		
US 4678611	A	19870707	US 1986-820751	19860117
PRIORITY APPLN. INFO.:			CH 1978-3537	A 19780403
			US 1979-23514	A3 19790323
			GB 1979-11478	A 19790402
			US 1980-217277	A3 19801216
			US 1982-370227	A1 19820420

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 92:24245
GI

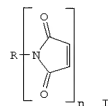
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Intermediates of general structure I (R = H, SO₃H; R₁ = H, Cl-8 alkyl, phenyl; R₂ = H, acyl), useful as diazotizable amines or as couplers, were

L51 ANSWER 145 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1979:168373 CAPLUS
DOCUMENT NUMBER: 90:168373
ORIGINAL REFERENCE NO.: 90:26723a,26726a
TITLE: N-Substituted maleimides
INVENTOR(S): Bartnik, Teresa; Penczek, Piotr; Matynia, Tadeusz
PATENT ASSIGNEE(S): Uniwersytet Marie Curie-Sklodowskiej, Pol.
SOURCE: Pol., 4 pp.
CODEN: POXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Polish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 94106	B1	19770730	PL 1974-172221	19740926
PRIORITY APPLN. INFO.:			PL 1974-172221	A 19740926

GI



AB The maleimide derivs. I [n = 1, 2, 3; R = mono-, di-, or trivalent org or inorg. group, e.g., alkanoyl, CO₂CO (Z = alkylene, arylene), CH₂CH₂, S, SO, S₂, O, P(O), SiR₁ (R₁ = alkyl, Ph) etc.] were prepared by the reaction

of Na or K maleimide with organic or inorg. halides. Thus, Na maleimide reacted with 1,4- and 1,5-(ClCH₂)₂ClO₆ in DMF in the presence of hydroquinone (polymerization inhibitor) to give 1,4- and 1,5-bis(maleimidomethyl)naphthalene.

IT 69886-12-OP
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 69886-12-0 CAPLUS

CN 1H-Pyrrole-2,5-dione, 1,1'-[1,5-naphthalenediylbis(methylene)]bis- (9CI)
(CA INDEX NAME)

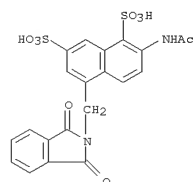
L51 ANSWER 144 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
prepd. and converted to azo dyes II (R₁ and R₂ as described; R₄ = diazotizable amine residue) or III (R and R₂ as described; R₅ = coupler residue), many of which were fiber reactive. Thus, successive alkylation of 2,1-AcNHClO₆SO₃H [53460-20-1] with N-methylphthalimide [118-29-6] in H₂SO₄, sulfonation with oleum, and cleavage of Ac and phthaloyl groups gave I (R = SO₃H, R₁ = R₂ = H)(IV) [72225-90-2]. Desulfonation of IV in refluxing HCl gave the hydrochloride [72225-91-3] of I (R = R₁ = R₂ = H).

V [72225-93-5], a fast rubine dye for polyamide fibers, was prepd. by coupling IV with diazotized 2,6,4-Cl₂(O₂N)C₆H₂NH₂ [99-30-9] and treating the product [72225-92-4] with 5-chloro-2,4,6-trifluoropyrimidine [697-83-6]. Numerous other dyes for cotton and polyamide fibers were prepd.

IT 72225-80-OP
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deacylation of)

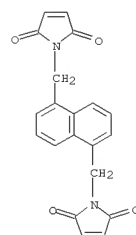
RN 72225-80-0 CAPLUS

CN 1,7-Naphthalenedisulfonic acid, 2-(acetylamino)-5-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]- (CA INDEX NAME)

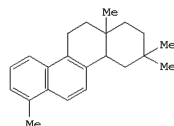


OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

L51 ANSWER 145 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L51 ANSWER 146 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1978:104992 CAPLUS
 DOCUMENT NUMBER: 88:104992
 ORIGINAL REFERENCE NO.: 88:16457a,16460a
 TITLE: Aromatic hydrocarbons from geological sources. Part IV. An octahydrochrysene derived from triterpenes, in oil shale:
 3,3,7,12a-tetramethyl-1,2,3,4,4a,11,12,12a-octahydrochrysene
 AUTHOR(S): Spyckerelle, Christian; Greiner, Alfred C.; Albrecht, Pierre; Ourisson, Guy
 CORPORATE SOURCE: Lab. Chim. Org. Subst. Nat., Univ. Louis Pasteur, Strasbourg, Fr.
 SOURCE: Journal of Chemical Research, Synopses (1977), (12), 332-3
 CODEN: JRPSDC; ISSN: 0308-2342
 DOCUMENT TYPE: Journal
 LANGUAGE: English/French
 GI



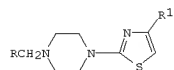
I

AB The octahydrochrysene I was isolated from Messel oil shale by liquid chromatog. and identified with a synthetic sample prepared by a convergent method. The result supports the derivation of I and other tetracyclic homologs from precursor pentacyclic triterpenes such as β -amyrin by loss of ring A followed by progressive aromatization under geochem. conditions.
 IT 65755-05-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and deprotection of)
 RN 65755-05-7 CAPLUS
 CN 1,4-Dioxaspiro[4.5]decane, 6,9,9-trimethyl-6-[2-(5-methyl-1-naphthalenyl)ethyl]- (CA INDEX NAME)

L51 ANSWER 147 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1978:22980 CAPLUS
 DOCUMENT NUMBER: 88:22980
 ORIGINAL REFERENCE NO.: 88:3697a,3700a
 TITLE: N-Thiazolyl-N'-naphthylmethylpiperazines
 INVENTOR(S): Regnier, Gilbert; Canevari, Roger; Poignant, Jean Claude
 PATENT ASSIGNEE(S): Science Union et Cie., Societe Francaise de Recherche Medicale, Fr.
 SOURCE: Ger. Offen., 14 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2714148	A1	19771013	DE 1977-2714148	19770330
DE 2714148	B2	19800807		
DE 2714148	C3	19811105		
ZA 7702026	A	19780530	ZA 1977-2026	19770404
FI 7701097	A	19771013	FI 1977-1097	19770406
SE 7704055	A	19771013	SE 1977-4055	19770406
NL 7703839	A	19771014	NL 1977-3839	19770407
AU 7724090	A	19781012	AU 1977-24090	19770407
FR 2348212	A1	19771110	FR 1977-10686	19770408
FR 2348212	B1	19800328		
US 4112092	A	19780905	US 1977-785855	19770408
JP 52125180	A	19771020	JP 1977-41260	19770411
BE 853513	A1	19771012	BE 1977-176642	19770412
GB 1518559	A	19780719	GB 1976-14811	19770412
PRIORITY APPLN. INFO.:			GB 1976-14811	A 19760412

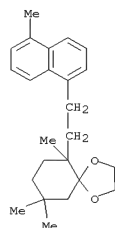
OTHER SOURCE(S): MARPAT 88:22980
 GI



I

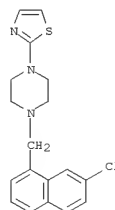
AB The title compds. I (R = ClOH7 or substituted naphthyl; R1 = H, Me, Ph) were prepared from ClOH7CH2Br or ClOH7CHO and 1-(2-thiazolyl)piperazine or 2-chlorothiazole and 1-(naphthylmethyl)piperazine. I are useful as central nervous system stimulants and anti-Parkinson's agents (no data).
 IT 64965-97-5P 64965-98-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 64965-97-5 CAPLUS
 CN Piperazine, 1-[(7-chloro-1-naphthalenyl)methyl]-4-(2-thiazolyl)- (CA INDEX NAME)

L51 ANSWER 146 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

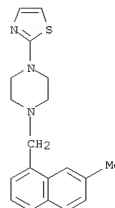


OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD
 (7 CITINGS)

L51 ANSWER 147 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

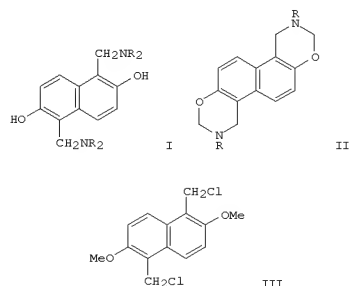


RN 64965-98-6 CAPLUS
 CN Piperazine, 1-[(7-methyl-1-naphthalenyl)methyl]-4-(2-thiazolyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
 (2 CITINGS)

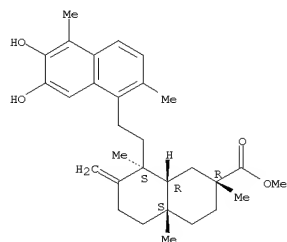
L51 ANSWER 148 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1976:121528 CAPLUS
 DOCUMENT NUMBER: 84:121528
 ORIGINAL REFERENCE NO.: 84:19721a,19724a
 TITLE: Mannich reaction and chloromethylation of some dihydroxynaphthalenes
 AUTHOR(S): Kuriakose, A. P.
 CORPORATE SOURCE: Fac. Sci., Maharaja Sayajirao Univ., Baroda, India
 SOURCE: Indian Journal of Chemistry (1975), 13(11), 1149-51
 CODEN: IJOCAP; ISSN: 0019-5103
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 84:121528
 GI



AB 2,6-Dihydroxynaphthalene reacted with HCHO and secondary and primary amines to give Mannich bases I (NR₂ = piperidino, morpholino) and II (R = Ph, PhCH₂); 2,6-dimethoxynaphthalene was chloromethylated to the 1,5-bis(chloromethyl) derivative III. The reaction of I and II with hexamethylenetetramine gave 1,5-diformyl-2,6-dihydroxynaphthalene, while 1,5-diformyl-2,6-dimethoxynaphthalene was obtained from III. The analogous Mannich bases prepared from 1,5-dihydroxynaphthalene did not give the 2,6-diformyl compound
 IT 58671-18-4P 58671-19-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 triterpenes
 RN 58671-18-4 CAPLUS
 CN 2,6-Naphthalenediol, 1,5-bis(1-piperidinylmethyl)- (CA INDEX NAME)

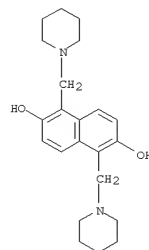
L51 ANSWER 149 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1975:531781 CAPLUS
 DOCUMENT NUMBER: 83:131781
 ORIGINAL REFERENCE NO.: 83:20745a,20748a
 TITLE: Rearrangements of tingenone. IV. Quinonoid triterpenes
 AUTHOR(S): Pomponi, Massimo; Delle Monache, Franco; Marini-Bettolo, Giovanni B.
 CORPORATE SOURCE: Cent. Chim. Recettori, Univ. Cattol. Sacro Cuore, Rome, Italy
 SOURCE: Analges de Quimica (1968-1979) (1974), 70(12), 1037-9
 CODEN: ANQUBU; ISSN: 0365-4990
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI For diagram(s), see printed CA Issue.
 AB Under acid (refluxing 2N H₂SO₄ or MeOH-H₂SO₄) tingenone (I) gave only isotingenone (II) whereas under Thiele conditions it gave di-O-acetylisingenone (III), the enol acetate (IV), and 1,2,5-trimethyl-6,7-diacetoxynaphthalene, which was formed via cleavage of ring C.
 IT 1259-19-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 1259-19-4 CAPLUS
 CN 2-Naphthalenecarboxylic acid, 8-[2-(6,7-dihydroxy-2,5-dimethyl-1-naphthalenyl)ethyl]decahydro-2,4a,8-trimethyl-7-methylene-, methyl ester, (2R,4aS,8S,8aR) - (CA INDEX NAME)

Absolute stereochemistry.

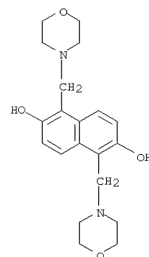


OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
 (2 CITINGS)

L51 ANSWER 148 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

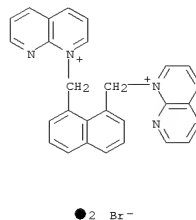


RN 58671-19-5 CAPLUS
 CN 2,6-Naphthalenediol, 1,5-bis(4-morpholinylmethyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
 (3 CITINGS)

L51 ANSWER 150 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1975:443291 CAPLUS
 DOCUMENT NUMBER: 83:43291
 ORIGINAL REFERENCE NO.: 83:6851a,6854a
 TITLE: Synthesis and stereochemistry of cyclic diquaternary ammonium salts of medium ring-size
 AUTHOR(S): Voegtli, Fritz; Bombach, Dietmar
 CORPORATE SOURCE: Inst. Org. Chem., Univ. Wuerzburg, Wuerzburg, Fed. Rep. Ger.
 SOURCE: Chemische Berichte (1975), 108(5), 1682-93
 CODEN: CHBEAM; ISSN: 0009-2940
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 GI For diagram(s), see printed CA Issue.
 AB The diquats I to VI were prepared by treating 2,2'-bipyridine, 3,3'-dimethyl-2,2'-bipyridine, or 1-(2-pyridyl)isoquinoline with 1,8-C₁₀H₆(CH₂Br)₂, 2-BrCH₂C₆H₄C₆H₄CH₂Br-2, o-C₆H₄(CH₂Br)₂, or (Z)-BrCH₂CH=CHCH₂Br in MeCN. Ring topomerization was not observed in these compds. even at higher temps.
 IT 56076-47-2P
 RL: PREP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and NMR of)
 RN 56076-47-2 CAPLUS
 CN 1,8-Naphthyridinium, 1,1'-[1,8-naphthalenediylbis(methylene)]bis-, dibromide (9CI) (CA INDEX NAME)



● 2 Br -

L51 ANSWER 151 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1973:418714 CAPLUS
DOCUMENT NUMBER: 79:18714
ORIGINAL REFERENCE NO.: 79:3011a,3014a
TITLE: Imidazole derivatives
INVENTOR(S): Edwards, Phillip Neil
PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd.
SOURCE: Ger. Offen., 39 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

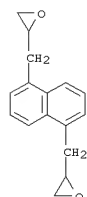
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2250345	A1	19730419	DE 1972-2250345	19721013
GB 1355631	A	19740605	GB 1971-47796	19711014
CA 982592	A1	19760127	CA 1972-152388	19720922
ZA 7206532	A	19730627	ZA 1972-6532	19720925
AU 7247065	A	19740404	AU 1972-47065	19720926
IL 40448	A	19750831	IL 1972-40448	19720926
US 3853907	A	19741210	US 1972-293058	19720928
PL 92397	B1	19770430	PL 1972-178290	19720928
HU 165080	B	19740628	HU 1972-1E533	19720929
FI 55831	B	19790629	FI 1972-2814	19721011
FI 55831	C	19791010		
DD 101893	A5	19731120	DD 1972-166193	19721012
BE 790089	A1	19730413	BE 1972-123097	19721013
NL 7213872	A	19730417	NL 1972-13872	19721013
FR 2157862	A1	19730608	FR 1972-36380	19721013
AT 320637	B	19750225	AT 1972-8785	19721013
AT 7400547	A	19750515	AT 1972-54774	19721013
SE 388419	B	19761004	SE 1972-13242	19721013
NO 136298	B	19770509	NO 1972-3684	19721013
CH 592083	A5	19771014	CH 1972-14996	19721013
JP 48048615	A	19730710	JP 1972-103162	19721014
JP 57053341	B	19821112		
US 3911133	A	19751007	US 1974-492841	19740729
NO 7603697	A	19730417	NO 1976-3697	19761029
NO 137443	B	19771121		
PRIORITY APPLN. INFO.:			GB 1971-47796	A 19711014
			US 1972-293058	A3 19720928
			NO 1972-3684	A 19721013

GI For diagram(s), see printed CA Issue.
AB Bactericidal bis(imidazolium halides) I and II [R = octyl, decyl, dodecyl, n-CH₁₅COCH₂CH(OH)CH₂, 2,4-Cl₂C₆H₃CH₂, 4-ClC₆H₄CH₂; R₁ = H, NH₂, Me; Q = C₂-10 alkylene, phenylenedimethylene, CH₂CONH(CH₂)_nNHCOCH₂ (n = 4-12) etc.; X = Cl, Br] (51 compds.) were prepared. Thus imidazole was treated with n-ClOCH₂Br to give 1-decylimidazole, which with BrCH₂CH₂Br gave I (R = decyl, R₁ = H, X = Br, Q = CH₂CH₂).
IT 42031-98-1P
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
RN 42031-98-1 CAPLUS
CN 1H-Imidazolium, 1,1'-[1,5-naphthalenediylbis(methylene)]bis[3-decyl-,

L51 ANSWER 152 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1972:141758 CAPLUS
DOCUMENT NUMBER: 76:141758
ORIGINAL REFERENCE NO.: 76:23049a,23052a
TITLE: Crystalline 1,5-diglycidynaphthalene and its cured products
INVENTOR(S): Parry, Harvey L.; Landua, Alton J.
PATENT ASSIGNEE(S): Shell Oil Co.
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

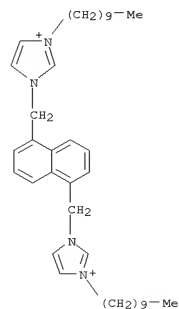
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3635843	A	19720118	US 1969-842526	19690717
PRIORITY APPLN. INFO.:			US 1969-842526	A 19690717

AB Epoxy resins compns. with improved thermal stability, useful as metal adhesives, were prepared by curing crystalline 1,5-diglycidynaphthalene (I) [34612-76-5] with an epoxy curing agent, e.g. m-phenylenediamine (II) [108-45-2]. The crystalline I was prepared by distillation of a mid cut containing mixed mono- and diallylnaphthalenes in the Friedel-Crafts alkylation of naphthalene before epoxidation of the diallylnaphthalene. Thus, a rod casting containing a stoichiometric amount of I and II had a glass transition temperature of 250 compared to 205, 240, and 165.deg. for similarly cured castings of diallylnaphthalene isomer mixture, bisphenol A diglycidyl ether, and a glycidyl ether of a novolak resin, resp.
IT 34612-76-5P
RL: PREP (Preparation) (manufacture of, for epoxy resin preparation)
RN 34612-76-5 CAPLUS
CN Oxirane, 2,2'-[1,5-naphthalenediylbis(methylene)]bis- (9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

L51 ANSWER 151 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
dichloride (9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L51 ANSWER 153 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1969:524780 CAPLUS
 DOCUMENT NUMBER: 71:124780
 ORIGINAL REFERENCE NO.: 71:23211a,23214a
 TITLE: Steroids and arynes. II. Some reactions of arynes with steroidal dienes and triens
 AUTHOR(S): Eckhard, I. F.; Heaney, Harry; Marples, Brian A.
 CORPORATE SOURCE: Univ. Technol., Loughborough, UK
 SOURCE: Journal of the Chemical Society [Section] C: Organic (1969), 16, 2098-104
 CODEN: JSOAX; ISSN: 0022-4952

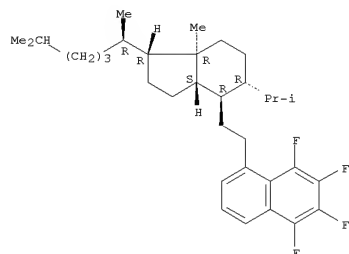
DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Steroid 5,7-dienes undergo the ene-reaction with benzyne and tetrachloro- and tetrafluorobenzyne. Tetrafluorobenzyne also forms a 5,8-adduct with

a 5,7-diene and with a 5,7,9(11)-triene. Cholesta-2,4-diene gives 1,4-adducts with benzyne and tetrafluorobenzyne. The pyrolyses of some adducts are discussed.

IT 24207-91-8P 24321-40-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 24207-91-8 CAPLUS
 CN Naphthalene, 5-[2-[1β-(1,5-dimethylhexyl)-3α,4,5,6,7,7a-hexahydro-5β-isopropyl-7aβ-methyl-4a-indanyl]ethyl]-1,2,3,4-tetrafluoro- (8CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 24321-40-2 CAPLUS
 CN Naphthalene, 5-[2-[1β-(1,5-dimethylhexyl)-3α,4,5,6,7,7a-hexahydro-5β-isopropyl-7aβ-methyl-4a-indanyl]ethyl]-1,2,3,4-tetrafluoro- (8CI) (CA INDEX NAME)

Absolute stereochemistry.

L51 ANSWER 154 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1968:105046 CAPLUS
 DOCUMENT NUMBER: 68:105046
 ORIGINAL REFERENCE NO.: 68:20275a,20278a
 TITLE: Diazonia hexacyclic aromatic systems from bis-(bromomethyl)naphthalenes
 AUTHOR(S): Bradsher, Charles K.; Sherer, James P.
 CORPORATE SOURCE: Duke Univ., Durham, NC, USA
 SOURCE: Journal of Heterocyclic Chemistry (1968), 5(2), 253-7
 CODEN: JHTCAD; ISSN: 0022-152X

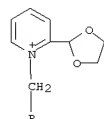
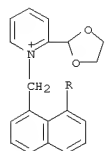
DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 68:105046
 GI For diagram(s), see printed CA Issue.
 AB Starting with the appropriate bis(bromomethyl)naphthalenes, 14a,16a-diazoniaanthra[1,2-a]anthracene salts (I), and the 4a,12a-(II,III) 4a,8a-(IV), and 8a,16a-diazoniadibenzo[b,k]chrysene (V) salts were prepared

IT 17966-02-8P 17966-03-9P 17966-04-0P
 18068-69-4P 18068-70-7P 18068-71-8P
 18068-72-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 17966-02-8 CAPLUS
 CN Pyridinium, 1,1'-(1,8-naphthylenedimethylene)bis[2-(1,3-dioxolan-2-yl)-, diperchlorate (8CI) (CA INDEX NAME)

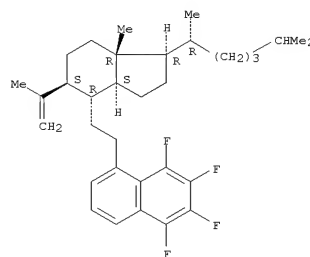
CM 1

CRN 47743-87-3
 CMF C28 H28 N2 O4



CM 2

L51 ANSWER 153 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
 (1 CITINGS)

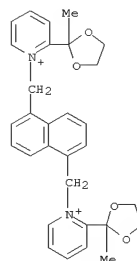
L51 ANSWER 154 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
 CRN 14797-73-0
 CMF C1 O4



RN 17966-03-9 CAPLUS
 CN Pyridinium, 1,1'-(1,5-naphthylenedimethylene)bis[2-(2-methyl-1,3-dioxolan-2-yl)-, diperchlorate (8CI) (CA INDEX NAME)

CM 1

CRN 47774-43-6
 CMF C30 H32 N2 O4



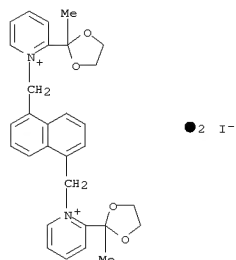
CM 2

CRN 14797-73-0
 CMF C1 O4

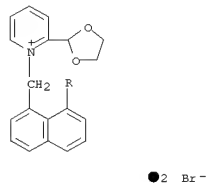


RN 17966-04-0 CAPLUS
 CN Pyridinium, 1,1'-(1,5-naphthylenedimethylene)bis[2-(2-methyl-1,3-dioxolan-2-yl)-, diperchlorate (8CI) (CA INDEX NAME)

L51 ANSWER 154 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
2-yl)-, diiodide (8CI) (CA INDEX NAME)



RN 18068-69-4 CAPLUS
CN Pyridinium, 1,1'-(1,8-naphthylenedimethylene)bis[2-(1,3-dioxolan-2-yl)-, dibromide (8CI) (CA INDEX NAME)

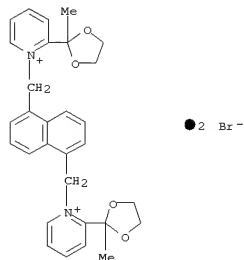


RN 18068-70-7 CAPLUS
CN Pyridinium, 1,1'-(1,5-naphthylenedimethylene)bis[2-(1,3-dioxolan-2-yl)-, dibromide (8CI) (CA INDEX NAME)

L51 ANSWER 154 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

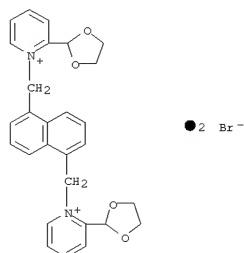


RN 18068-72-9 CAPLUS
CN Pyridinium, 1,1'-(1,5-naphthylenedimethylene)bis[2-(2-methyl-1,3-dioxolan-2-yl)-, dibromide (8CI) (CA INDEX NAME)



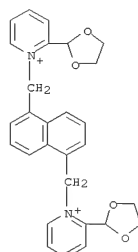
OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS
RECORD (4 CITINGS)

L51 ANSWER 154 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



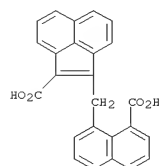
RN 18068-71-8 CAPLUS
CN Pyridinium, 1,1'-(1,5-naphthylenedimethylene)bis[2-(1,3-dioxolan-2-yl)-, diperchlorate (8CI) (CA INDEX NAME)

CM 1
CRN 47745-26-6
CMF C28 H28 N2 O4



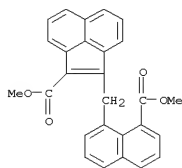
CM 2
CRN 14797-73-0
CMF C1 O4

L51 ANSWER 155 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1967:10786 CAPLUS
DOCUMENT NUMBER: 66:10786
ORIGINAL REFERENCE NO.: 66:2071a, 2074a
TITLE: Reaction between alcoholic potassium hydroxide and 1-chloroacenaphthylene-2-carboxylic acid. IV
AUTHOR(S): Ghigi, Elisa; Drusiani, Annamaria; Giovanninetti, Giuseppe
CORPORATE SOURCE: Univ. Bologna, Bologna, Italy
SOURCE: Annali di Chimica (Rome, Italy) (1966), 56(7), 786-97
CODEN: ANCRAL; ISSN: 0003-4592
DOCUMENT TYPE: Journal
LANGUAGE: Italian
GI For diagram(s), see printed CA Issue.
AB cf. CA 59, 15225a. 1-Chloroacenaphthylene-2-carboxylic acid (I) (4 g.) was refluxed with 80 g. 20% alc. KOH. The resulting solution was cooled, filtered, diluted with water, and acidified with dilute H2SO4. The precipitate was digested with 10% Na2CO3 and the resulting solution reacidified with dilute H2SO4 to give a yellow precipitate (2 g., m. 138-40°), which was steam distilled to give 0.2 g. acenaphthenone. The nonvolatile portion was filtered and dried and yielded products that depended on the method of crystallization. Extraction with hot MeOH, EtOH, or Me2CO gave a solution from which was obtained 0.85 g. orange-red 1-ethoxy-acenaphthylene-2-carboxylic acid, m. 168° (pKa 7.54), which with CH2N2 gave a red crystalline Me ester, m. 64°. Crystallization from C6H6 gave 0.2 g. yellow crystals (m. 250°) with analysis C25H16O4, for which the structure 1-(8-carboxy-1-naphthylmethyl)acenaphthylene-2-carboxylic acid (II) is proposed (pKa, 5.29, pKa2 6.72) (mono-Me ester m. 170°; di-Me ester m. 195°). Concentration of the C6H6 solution gave small quantities of colorless needles of naphthalic anhydride, m. 267°. From the mother acid solution 0.8 g. of a crystalline solid slowly separated Recrystn. from water gave colorless needles of homonaphthalic acid (III) (m. 214°, pKa 4.95). Reaction mechanisms are proposed.
IT 13261-67-1P 13261-68-2P 29593-54-2P
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
RN 13261-67-1 CAPLUS
CN 1-Acenaphthylenecarboxylic acid, 2-[(8-carboxy-1-naphthalenyl)methyl]- (CA INDEX NAME)



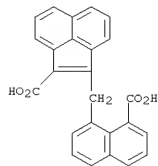
RN 13261-68-2 CAPLUS

L51 ANSWER 155 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN 1-Acenaphthylenecarboxylic acid, 2-[[8-(methoxycarbonyl)-1-naphthalenyl]methyl]-, methyl ester (CA INDEX NAME)



RN 29593-54-2 CAPLUS
CN 1-Acenaphthylenecarboxylic acid, 2-[[8-(carboxy-1-naphthyl)methyl]-, monomethyl ester (8CI) (CA INDEX NAME)

CM 1
CRN 13261-67-1
CMF C25 H16 O4



CM 2
CRN 67-56-1
CMF C H4 O

H₃C-OH

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

L51 ANSWER 157 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1966:473587 CAPLUS
DOCUMENT NUMBER: 65:73587
ORIGINAL REFERENCE NO.: 65:13740e-h
TITLE: Isocyanurates containing isocyanate groups
INVENTOR(S): Zenner, Karl F.; Holschmidt, Hans; Oertel, Guenter
PATENT ASSIGNEE(S): Farbenfabriken Bayer A.-G.
SOURCE: 19 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 671994		19660301	BE	19651108
DE 1222067			DE	
NL 6514408			NL	

PRIORITY APPLN. INFO.: DE 19641107

AB Comps. (I, Y = NCO) (Ia) were prepared by reduction of the corresponding NO₂ derivative followed by treating with COCl₂. The required NO₂ comps. may be obtained by condensation of the appropriate nitro-substituted isocyanate or by nitration of substituted isocyanurates. Thus, a mixture of I (X = CH₂, Ar = C₆H₄, Y = p-NO₂) 427 and Raney Ni 40 g. in dioxane 1.5 l. was treated with H at 60°/60 atmospheric After reduction the mixture was heated to boiling, filtered and cooled to give 90% I (X = CH₂, Ar = C₆H₄, Y = p-NH₂)

(II), m. 228-30°. II 300 was added with agitation to a solution of COCl₂ 500 g. in C₆H₅Cl 2.5 l. at 0° and the mixture kept overnight and heated, excess COCl₂ added at 110°, until a slight yellow color developed and then excess COCl₂ was removed by a N stream. Cooling gave 95% I (X = CH₂, Ar = C₆H₄, Y = p-NCO) m. 186-7°. Similarly, the following I were prepared (X, Ar, Y, m.p., and % yield given): CH₂, C₆H₄, m-NH₂, 159-61°, 93; CH₂, C₆H₄, m-NCO, 99-101°, 91; CH₂, C₆H₄, mixed NH₂, 70-120°, 84; CH₂, C₆H₄, mixed NCO, 80-105°, 83; CH₂, p-Me₃C₆H₃, mixed NH₂, 207-22°, 89; CH₂, p-Me₃C₆H₃, mixed NCO, 212-25°, 79; CH₂CH₂, C₆H₄, mixed NH₂, 149-60°, 94; CH₂CH₂, C₆H₄, mixed NCO, -, 100; CH₂, 1-ClO₂H₆, 5-NH₂, 289-96°, 87; CH₂, 1-ClO₂H₆, 5-NCO, 235-7°, 83; CH₂CH₂OCO, C₆H₄, m-NH₂, 151°, 83; CH₂CH₂OCO, C₆H₄, m-NCO, - (oil), 100; CH₂O(CH₂)₃, C₆H₄, mixed NH₂, - (oil), 90; CH₂O(CH₂)₃, C₆H₄, mixed NCO, - (oil), 100. I (X

= absent, Ar = C₆H₄, Y = o-, m-, or p-NO₂) do not reduce cleanly to the corresponding NH₂.

IT 10158-92-6P, Isocyanic acid, (trioxo-s-triazine-1,3,5-(2H,4H,6H)-triyl)tris(methylene-5,1-naphthylene) ester 10421-61-1P, s-Triazine-2,4,6-(1H,3H,5H)-trione, tris[(5-amino-1-naphthyl)methyl]-
RL: PREP (Preparation)
(preparation of)

RN 10158-92-6 CAPLUS
CN 1,3,5-Triazine-2,4,6-(1H,3H,5H)-trione, 1,3,5-tris[(5-isocyanato-1-naphthalenyl)methyl]- (CA INDEX NAME)

L51 ANSWER 156 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1966:473588 CAPLUS
DOCUMENT NUMBER: 65:73588
ORIGINAL REFERENCE NO.: 65:13740h,13741a
TITLE: 1-Methoxyphenyl-4,6-diamino-1,2-dihydrotriazines
INVENTOR(S): Ueda, Takeo
SOURCE: 2 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

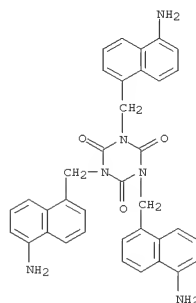
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 41011539	B4	19660627	JP	19610907

PRIORITY APPLN. INFO.: JP 19610907

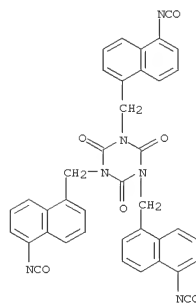
AB Manufacture of I, useful as antispasmodics, was described. In an example, 2 g. p-methoxyphenylbiguanide is refluxed 5 hrs. in 5 cc. Me₂CO to give 1.5 g. I (R₁ = R₂ = Me), prisms, m. 205° (H₂O). Similarly prepared are the following I (R₁, R₂, and m.p. given; all being prisms from H₂O): Me, Et, 181-2°, iso-Pr, iso-Pr, 203-4°, Me, Ph, 212-14°.

IT 10421-61-1P, s-Triazine-2,4,6-(1H,3H,5H)-trione, tris[(5-amino-1-naphthyl)methyl]-
RL: PREP (Preparation)
(preparation of)

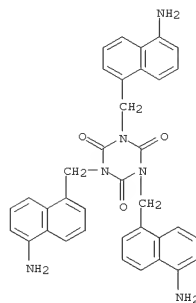
RN 10421-61-1 CAPLUS
CN 1,3,5-Triazine-2,4,6-(1H,3H,5H)-trione, 1,3,5-tris[(5-amino-1-naphthalenyl)methyl]- (CA INDEX NAME)



L51 ANSWER 157 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 10421-61-1 CAPLUS
CN 1,3,5-Triazine-2,4,6-(1H,3H,5H)-trione, 1,3,5-tris[(5-amino-1-naphthalenyl)methyl]- (CA INDEX NAME)

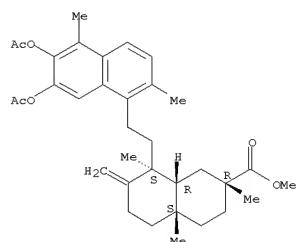


L51 ANSWER 158 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1965:417221 CAPLUS
 DOCUMENT NUMBER: 63:17221
 ORIGINAL REFERENCE NO.: 63:3065f-h,3066a
 TITLE: Infrared spectra of alkanesulfonic acids, chlorosulfonated polyethylene, and their derivatives
 AUTHOR(S): Nersisyan, Arthur; Johnson, Paul R.
 CORPORATE SOURCE: E. I. du Pont de Nemours & Co., Inc., Wilmington, DE
 SOURCE: Journal of Applied Polymer Science (1965), 9(5), 1653-68
 CODEN: JAPNAB; ISSN: 0021-8995
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The ir spectra of RSO₃H (R = Me, Bu, and n-C₁₂H₂₅), their resp. Me, Et, Pr, and Bu esters, amides, chlorides, alkali metal, Ag, and amine salts, were compared with analogous structures derived from chlorinated and chlorosulfonated polyethylenes. A linear relation between the sym. and asym. S-O stretching frequencies is shown to be valid for the simple alkanesulfonic acid derivs. and those of chlorinated and chlorosulfonated polyethylene. The following RSO₃R' were prepared by known procedures (R, R', % yield, and b.p./mm. given): Me, Me, 25, 100°/25; Me, Et, 57, 88.5°/11; Me, Pr, 61, 94°/8.8; Me, Bu, 90, 105°/8.5; Bu, Me, 100, 74°/2; Bu, Et, 94, 75.5°/1.4; Bu, Pr, 94, 79-80°/1; Bu, Bu, 91, 88-90°/1; n-C₁₂H₂₅, Me, 96, 130-3°/0.3; n-C₁₂H₂₅, Et, 90, 132-5°/0.3; n-C₁₂H₂₅, Pr, 90, 142-3°/0.3; n-C₁₂H₂₅, Bu, 90, 150-2°/0.3. RSO₂NR'R' were prepared by treating 1 mole RSO₂Cl with 2.5 moles R'R''NH in a solvent at 0° and distilling the product. Compds. in which R represents a polyethylene residue were isolated by precipitation with iso-PrOH. The following RSO₂NR'R' were prepared (R, R', R'', % yield, and b.p./mm. given): Me, H, Et, 90, 105-7°/0.3; Me, Et, Et, 92, 58.5°/0.35; Bu, H, Et, 95, 100-2°/0.3; Bu, Et, Et, 85, 77°/0.3; Hypalon-20 (I), H, Me, 100, --; I, Me, Me, 100, --; I, H, Et, 100, --; I, Et, Et, 100, --; I, H, Pr, 100, --; I, Pr, Pr, 100, --; I, H, Bu, 100, --; I, Bu, Bu, 100, --; I, R' + R'' + N = 1-pyrrolidinyl, 100, --; I, R' + R'' + N = piperidino, 100, --.
 IT 2587-45-3
 (Derived from data in the 7th Collective Formula Index (1962-1966))
 RN 2587-45-3 CAPLUS
 CN 8,14-Seco-D:B-friedo-25-noroleana-1,3,5(10),6,8,14(26)-hexaen-29-oic acid, 2,3-dihydroxy-, methyl ester, diacetate (8CI) (CA INDEX NAME)

Absolute stereochemistry.

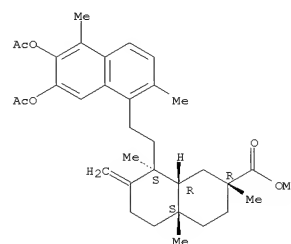
L51 ANSWER 159 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1965:417220 CAPLUS
 DOCUMENT NUMBER: 63:17220
 ORIGINAL REFERENCE NO.: 63:3065f
 TITLE: Infrared spectra of the poly-1-butene polymorphs
 AUTHOR(S): Luongo, J. P.; Salovey, R.
 CORPORATE SOURCE: Bell Telephone Labs., Murray Hill, NJ
 SOURCE: Journal of Polymer Science, Part B: Polymer Letters (1965), 3(6), 513-15
 CODEN: JPSBDU; ISSN: 0449-2986
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 AB The ir spectra (2000-400 cm.⁻¹) of 3 polymorphic forms of poly-1-butene have been obtained, and a number of differences in the spectra are noted. Stable modification III was prepared by casting the polymer from CCl₄ solution. Unstable modification II was formed by cooling the polymer from the melt to room temperature. II began converting to the stable modification I within 1/2 hr.
 IT 2587-45-3
 (Derived from data in the 7th Collective Formula Index (1962-1966))
 RN 2587-45-3 CAPLUS
 CN 8,14-Seco-D:B-friedo-25-noroleana-1,3,5(10),6,8,14(26)-hexaen-29-oic acid, 2,3-dihydroxy-, methyl ester, diacetate (8CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD
 (9 CITINGS)

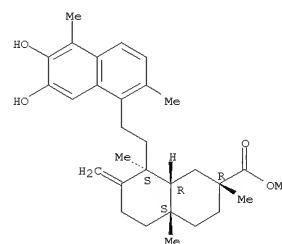
L51 ANSWER 158 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
 (2 CITINGS)

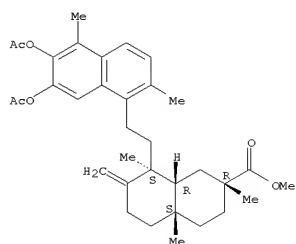
L51 ANSWER 160 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1965:416982 CAPLUS
 DOCUMENT NUMBER: 63:16982
 ORIGINAL REFERENCE NO.: 63:3005d-f
 TITLE: Pristimerin. Spectroscopic properties of the dienone-phenol-type rearrangement products and other derivatives
 AUTHOR(S): Nakanishi, Koji; Takahashi, Yoshikazu; Budzikiewicz, Herbert
 CORPORATE SOURCE: Tohoku Univ., Sendai, Japan
 SOURCE: Journal of Organic Chemistry (1965), 30(6), 1729-34
 CODEN: JOCEAH; ISSN: 0022-3263
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI For diagram(s), see printed CA Issue.
 AB The dienone-phenol-type system in the unique quinonoid triterpene, pristimerin (I), gives rise to three isomers upon treatment with acid. Structures have already been proposed for these rearrangement products, but closer inspection of their spectroscopic properties indicates that the structure of the second isomer should be revised. These aspects are discussed together with mass spectrometric and other spectroscopic properties of I derivatives. The so-called reductive acetates of I and celastrol are still not fully characterized and this point is also discussed.
 IT 1259-19-4, Isopristimerin I 2587-45-3, Isopristimerin I, diacetate (spectrum of)
 RN 1259-19-4 CAPLUS
 CN 2-Naphthalenecarboxylic acid, 8-[2-(6,7-dihydroxy-2,5-dimethyl-1-naphthalenyl)ethyl]decahydro-2,4a,8-trimethyl-7-methylene-, methyl ester, (2R,4aS,8S,8aR)- (CA INDEX NAME)

Absolute stereochemistry.



RN 2587-45-3 CAPLUS
 CN 8,14-Seco-D:B-friedo-25-noroleana-1,3,5(10),6,8,14(26)-hexaen-29-oic acid, 2,3-dihydroxy-, methyl ester, diacetate (8CI) (CA INDEX NAME)

Absolute stereochemistry.



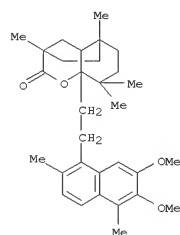
OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD
(6 CITINGS)

L51 ANSWER 161 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1965:66143 CAPLUS
DOCUMENT NUMBER: 62:66143
ORIGINAL REFERENCE NO.: 62:11694h,11695a
TITLE: α -(O,O-Dialkylldithiophosphoryl)- β -alkoxypropionamides as insecticides
INVENTOR(S): Pohlmann, Heinz; Dickhaeuser, Heiner; Scheuerer, Guenter; Adolphi, Heinrich; Stummeyer, Herbert
PATENT ASSIGNEE(S): Badische Anilin- & Soda-Fabrik A.-G.
SOURCE: 14 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1382442		19641218	FR 1964-960803	19640118
BE 642650			BE	
DE 1182467			DE	
GB 1043146			GB	
			DE	19630119

PRIORITY APPLN. INFO.:
AB Amides of the general formula (RO)2P(S)SCH(CH2OR1)CONHR2 (I) are prepared and can be used against *Macrophisum pisi*, *Aphis fabae*, *Drosophila*, and *Aedes aegypti*. Thus, 21.0 parts EtOCH2CHBrCONHMe is added to 20.3 parts (EtO)2P(S)SNH4 in 50 parts Me2CO and the mixture refluxed 5 hrs. to give 23.2 parts α -(O,O-diethylldithiophosphoryl)- β -ethoxy-N-methylpropionamide, m. 77-8°. Similarly prepared are the following I(R, R1, R2, and m.p. given): Et, Me, Me, 77-8°; Et, Et, H, 61-2°; Me, Et, Me, --; Et, Et, Et, 72-3°; Et, Et, iso-Pr, 78-9°.

IT 1906-21-4
(Derived from data in the 7th Collective Formula Index (1962-1966))
RN 1906-21-4 CAPLUS
CN 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-8-hydroxy-2,4a,7,7-tetramethyl-, δ -lactone (7CI, 8CI) (CA INDEX NAME)

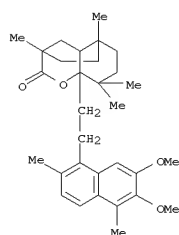


L51 ANSWER 162 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1965:66142 CAPLUS
DOCUMENT NUMBER: 62:66142
ORIGINAL REFERENCE NO.: 62:11694g-h
TITLE: Catalyst for oxidizing benzene to maleic anhydride
INVENTOR(S): Andrieux, Jacques
PATENT ASSIGNEE(S): Produits Chimiques Pechiney-Saint-Gobain
SOURCE: 10 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1372476		19640918	FR 1963-936112	19630527
BE 648387			BE	
			FR	19630527

AB The inert support is made of rugged grains of fused Al2O3, processed by HCl or HNO3. The grains are coated with active material: to a mixture 20-40% V2O4, 80-60% V2O5 the following complex is added, MoO3 + P2O5 (MoO3-P2O5 .apprx.12-24%) + the Na salt of the corresponding heteropolyacid (salt-oxides .apprx.0.05-0.3). The catalyst is then dried, activated by heating up to 120° under inert atmospheric, from 120 to 400° under a stream of air, and calcined during 4 h. at 400°. Promoter (Cu, Ti, Co, or Ni salts) can be added to the V oxides. The catalyst can be used at high temperature (>500°), in standing beds, for oxidizing C6H6 to maleic anhydride, at high rates of flow (210-70 g. C6H6/h. unit mass of catalyst).

IT 1906-21-4
(Derived from data in the 7th Collective Formula Index (1962-1966))
RN 1906-21-4 CAPLUS
CN 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-8-hydroxy-2,4a,7,7-tetramethyl-, δ -lactone (7CI, 8CI) (CA INDEX NAME)



L51 ANSWER 163 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1965:9251 CAPLUS
DOCUMENT NUMBER: 62:9251
ORIGINAL REFERENCE NO.: 62:1694h,1695a-e
TITLE: Stereochemistry. V. Brominated derivatives of 8-lanostene
AUTHOR(S): Lacoume, Bernard; Levisalles, Jacques
CORPORATE SOURCE: Inst. Chim., Strasbourg
SOURCE: Bulletin de la Societe Chimique de France (1964), (9), 2245-9
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: French

AB cf. CA 62, Number 2. A solution of 385 mg. Br in 25 ml. HOAc added to a solution of 1 g. lanostenone in 50 ml. HOAc containing a few drops of HBr, 100 ml. HOAc added after decolorization, and the solution kept 24 hrs. in the dark gave 100 mg. 2 β -bromo-8-lanosten-3-one (I), m. 170° (Me2CO), [α]D 159° (all in dioxane), and 600 mg. 2 α -bromo-8-lanosten-3-one (II), m. 139°. A solution of 355 mg. Br in 25 ml. HOAc added to a solution of 1 g. 3-acetoxy-2,8-lanostadiene and 0.2 g. NaOAc in 100 ml. HOAc and the mixture after 3 hrs. poured over ice gave 900 mg. II, [α]D 16°. A solution of 200 mg. 2 α -bromo-8-lanosten-3 β -ol (III) and 100 mg. NaOAc in 25 ml. HOAc stirred 1.5 hrs. with a solution of 400 mg. Na2Cr2O7.2H2O 25 ml. HOAc gave 155mg. II. A solution of 5 g. NaBH4 in 100 ml. EtOH added to a solution of 2 g. II and 5 g. H3BO3 in 150 ml. EtOH and the mixture stirred 3 hrs. gave 1.8 g. III, m. 139°, [α]D 24°. A 10% solution of KOH in EtOH (200 ml.) added to a solution of 1.8 g. III in 200 ml. 2:1 EtOH-C6H6 and the mixture stirred 12 hrs. in the cold gave 1.45 g. 2,3 β epoxy-8-lanosten-3-one (IV), m. 138-9°, [α]D 113°. A solution of 1 g. IV and 500 mg. LiAlH4 in 100 ml. dry Et2O refluxed 3 hrs. gave 200 mg. 8-lanosten-2 β -ol (V), m. 93° (Et2O-EtOH), [α]D 87° (acetate m. 143-4°, [α]D 87°), and some 8-lanosten-3 β -ol, m. 145°. When the crude mixture from the reduction of 1 g. IV was oxidized with 1.5 g. Na2Cr2O7.2H2O in 200 ml. HOAc, 675 mg. 8-lanosten-3-one, m. 119-20°, [α]D 68°, and 205 mg. 8-lanosten 2 one (VI), m. 106-7°, [α]D 88°, were obtained. Oxidation of 100 mg. V in HOAc with Na2Cr2O7 gave 85 mg. VI. A solution of 200 mg. VI in 50 ml. boiling EtOH treated with 5 g. Na gave 30 mg. V and 150 mg. 8-lanosten-2 α -ol (VII), m. 104-6° (Et2O-MeOH), [α]D 50°; m. 100° (Et2O-MeOH), [α]D 27°. VI (200 mg.) in EtOH stirred 5 hrs. with 100 mg. NaBH4 gave 170 mg. V and 20 mg. VII. IV (1 g.) in 25 ml. CHCl3 shaken 15 min. with 20 ml. 48% HBr gave 750 mg. III and 200 mg. 3 α -bromo-8-lanosten-2 β -ol (VIII), m. 77-9° and 103-4° (Me2CO), [α]D 114°; acetate m. 93° (Et2O-EtOH), [α]D 90°. Hydrogenation of 100 mg. VIII in EtOAc under 100 atmospheric with Pd-C gave 65 mg. V. VIII (300 mg.) with

L51 ANSWER 163 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)
Na₂Cr₂O₇ and NaOAc in HOAc gave 220 mg. 3 α -bromo-8-lanosten-2-one (IX), m. 140-1° (EtOH), [α]_D 146°. IX (200 mg.) shaken with Zn and HOAc 24 hrs. in the cold gave 170 mg. VI. A soln. of 200 mg. IX in 20 ml. HOAc treated with 2 drops 48% HBr and the mixt. kept 4 hrs. in the dark gave 100 mg. IX and 60 mg. 3 β -bromo-8-lanosten-2-one (X), m. 166-7° (Me₂CO), [α]_D 68°. A soln. of 200 mg. X in 20 ml. HOAc shaken with Zn 24 hrs. in the cold gave 160 mg. VI. A soln. of 200 mg. X and 1 g. H₃BO₃ in 150 ml. EtOH shaken 3 hrs. with a soln. of 1 g. NaBH₄ in 50 ml. EtOH gave 180 mg. 3 β -bromo-8-lanosten-2 β -ol (XI), m. 112° (EtOH), [α]_D 77°. XI with AcCl in C₆H₅Me₂ after 3 days in the cold gave the acetate, m. 128-30° (Et₂O-MeOH). A soln. of XI in HOAc treated with NaOAc and Na₂Cr₂O₇ gave X. XI treated with 5% alc. KOH gave VI after 3 hrs. in the cold. The structures of many of the compds. were confirmed by uv, ir, N.M.R., and circular dichroism studies. The

position

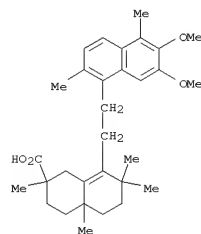
of equil. between I and II was detd. by circular dichroism studies to be at 22 \pm 5% I; the equil. mixt. of IX and X contained 38% IX. The data obtained are sometimes not in complete agreement with those of Barton, et al. (CA 51, 17975e).

IT 1260-10-2P, 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]-1,2,3,4,4a,5,6,7-octahydro-2,4a,7,7-tetramethyl- 1906-20-3P, 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-8a-hydroxy-2,4a,7,7-tetramethyl-, γ -lactone 1906-21-4P, 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-8-hydroxy-2,4a,7,7-tetramethyl-, δ -lactone
RL: PREP (Preparation)

(preparation of)

RN 1260-10-2 CAPLUS

CN 2-Naphthalenecarboxylic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthalenyl)ethyl]-1,2,3,4,4a,5,6,7-octahydro-2,4a,7,7-tetramethyl- (CA INDEX NAME)



RN 1906-20-3 CAPLUS

CN 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-8a-hydroxy-2,4a,7,7-tetramethyl-, γ -lactone (7CI, 8CI) (CA INDEX NAME)

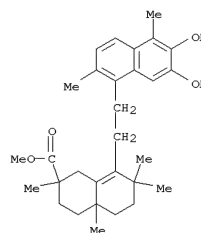
L51 ANSWER 164 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN
ACCESSION NUMBER: 1965:9250 CAPLUS
DOCUMENT NUMBER: 62:9250
ORIGINAL REFERENCE NO.: 62:1694f-h
TITLE: Some applications of infrared and nuclear magnetic resonance measurements in structural studies. Structure of pristimerin, a quinonoid triterpene Nakanishi, K. Kyodiku Univ., Tokyo Symposium on Phytochemistry, Proceedings of a Meeting Held as Part of the Golden Jubilee Congress of the University of Hong Kong (1964), 1961, 97-100 CODEN: 14HTA5 Journal
DOCUMENT TYPE: Unavailable
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB The N.M.R. Me peaks of all derivs. of pristimerin (the Me ester of celastrol) appear as singlets, thus suggesting the oleanane type ring E. Treatment of pristimerin with 2N H₂SO₄ in N gave the naphthalenoid compds., isopristimerin-I (I), m. 207-8° and -II, m. 70-5°. The latter is identical with then hydrolysis product of Thiele acetate. The N.M.R. and ir data on these compds. can only be accounted for by cleaving the bond between C-8 and C-14, so that an intramol. bond can be formed between the ester group and 1 of the OH groups. A determination of the position of the methoxycarbonyl group is based on the possibilities, C-17 and C-20, and the several data suggesting the

position are enumerated.

IT 1259-32-1 (Derived from data in the 7th Collective Formula Index (1962-1966))

RN 1259-32-1 CAPLUS

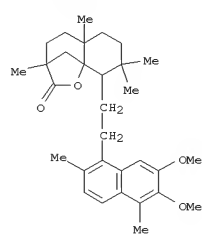
CN 2-Naphthoic acid, 8-[2-(6,7-dihydroxy-2,5-dimethyl-1-naphthyl)ethyl]-1,2,3,4,4a,5,6,7-octahydro-2,4a,7,7-tetramethyl-, methyl ester, stereoisomer (8CI) (CA INDEX NAME)



IT 1259-19-4P, Isopristimerin I 1260-10-2P, 2-Naphthoic acid,

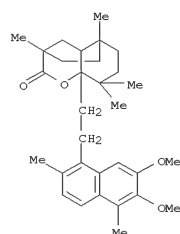
8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]-1,2,3,4,4a,5,6,7-octahydro-2,4a,7,7-tetramethyl- 1906-20-3P, 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-8a-hydroxy-

L51 ANSWER 163 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)



RN 1906-21-4 CAPLUS

CN 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-8-hydroxy-2,4a,7,7-tetramethyl-, δ -lactone (7CI, 8CI) (CA INDEX NAME)



L51 ANSWER 164 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)

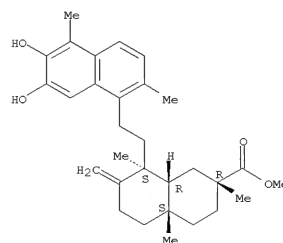
2,4a,7,7-tetramethyl-, γ -lactone 1906-21-4P, 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-8-hydroxy-2,4a,7,7-tetramethyl-, δ -lactone
RL: PREP (Preparation)

(prepn. of)

RN 1259-19-4 CAPLUS

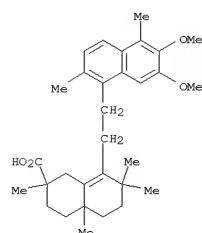
CN 2-Naphthalenecarboxylic acid, 8-[2-(6,7-dihydroxy-2,5-dimethyl-1-naphthalenyl)ethyl]decahydro-2,4a,8-trimethyl-7-methylene-, methyl ester, (2R,4aS,8S,8aR)- (CA INDEX NAME)

Absolute stereochemistry.



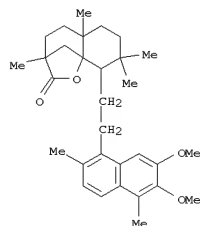
RN 1260-10-2 CAPLUS

CN 2-Naphthalenecarboxylic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthalenyl)ethyl]-1,2,3,4,4a,5,6,7-octahydro-2,4a,7,7-tetramethyl- (CA INDEX NAME)

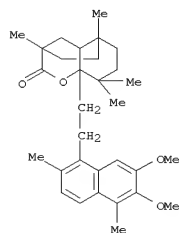


RN 1906-20-3 CAPLUS

CN 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-8a-hydroxy-2,4a,7,7-tetramethyl-, γ -lactone (7CI, 8CI) (CA INDEX NAME)



RN 1906-21-4 CAPLUS
CN 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-8-hydroxy-2,4a,7,7-tetramethyl-, 8-lactone (7CI, 8CI) (CA INDEX NAME)



L51 ANSWER 166 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1963:403430 CAPLUS
DOCUMENT NUMBER: 59:3430
ORIGINAL REFERENCE NO.: 59:580h,581a-e
TITLE: Naphthoquinone diazides
INVENTOR(S): Sues, Oskar
PATENT ASSIGNEE(S): Azoplate Corp.
SOURCE: 10 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3046117	---	19620724	US 1958-715221	19580214
PRIORITY APPLN. INFO.:			DE	19510324

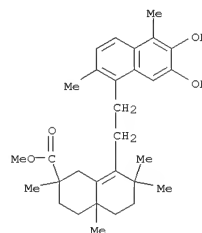
AB Comps. (I, II, III, IV and V), where X is A, B, or C, were used in the production of printing plates. 2-(1-Piperidyl)methyl-3-hydroxydiphenylene oxide (5.6 g.) is dissolved in 20 mL. dioxane, 5 g. 5-methyl-1,2-benzoquinone-2-diazide-4-sulfonyl chloride dissolved in 50 mL. dioxane is added, 50 mL. 5% soda is added slowly, the mixture is agitated for several hrs., 350 mL. H₂O and 100 mL. 16% HCl are added, and NaOH and Na₂CO₃ are added to neutralize the mixture, and precipitation gives I [X = A (R = H, R' = Me), NRR' = piperidino] (VI), yellow precipitate, m. approx. 190° (decomposition). A 2% solution of VI is applied to a rough Al plate, the coating is dried at approx. 60°, exposed to light under a transparent pattern, the image is developed with 5% H₃PO₄, the plate is rinsed with H₂O, inked with greasy ink, and the neg. image shows on a clean metallic background. Similarly prepared and treated are (m.p. given):

I [X = A (R = Me, R' = H), NRR' = piperidino], approx. 100° (darkening); I (X = B, NRR' = piperidino), approx. 185° (decomposition); II (R = C, R' = H, R'' = piperidinomethyl), approx. 105° (decomposition); II (R = piperidinomethyl, R' = C, R'' = H), approx. 120° (decomposition); III [X = B, NRR' = piperidino], 125° (charring); III (X = C, NRR' = piperidino), above 120° (decomposition); 2,7-(XO)2C₁₀H₅CH₂NRR' (X = C and NRR' = piperidino), above 140° (charring); 4,1-(RR'NCH₂)C₁₀H₆OX (NRR' = piperidino and X = C), approx. 110° (decomposition); II (R = X, R' = H, R'' = CH₂NRR'), where X = C and NRR' = piperidino, above 150° (decomposition); II (R = MeNCH₂, R' = X, R'' = H, in which X = C), 140° (decomposition); IV (X = C, NRR' = piperidino), 135-8° (decomposition); 4,2-[4,3-X(R'RNCH₂)C₆H₃](R'RNCH₂)C₆H₃X (X = C and NRR' = piperidino), above 105° (decomposition); [4,3-X(R'RNCH₂)C₆H₂]2SO₂ (X = C and NRR' = piperidino), 95° (decomposition); 2,7-XC₁₀H₅CH₂NMe₂ (X = C), 133-4° (decomposition); (V) (X = C and NRR' = piperidino), approx. 180° (decomposition); 2-XC₁₀H₆CH₂NMe₂ in which X = C, 150° (decomposition); 2-XC₁₀H₆CH₂NMe₂ in which X = C, 140° (decomposition);

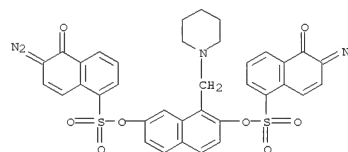
and 2-XC₁₀H₆CH₂NPr₂ in which X = C, 145° (decomposition).
IT 106278-33-5P, 2,7-Naphthalenediol, 1-(piperidinomethyl)-, bis (6-diazo-5,6-dihydro-5-oxo-1-naphthalenesulfonate)
RL: PREP (Preparation)
(preparation of)

RN 106278-33-5 CAPLUS

L51 ANSWER 165 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1965:9249 CAPLUS
DOCUMENT NUMBER: 62:9249
ORIGINAL REFERENCE NO.: 62:1694e-f
TITLE: The preparation of oryzanol
AUTHOR(S): Kato, Akio; Tsuchiya, Tomotaro
CORPORATE SOURCE: Govt. Chem. Res. Inst., Tokyo
SOURCE: Tokyo Kogyo Shikensho Hokoku (1961), 56(8), 343-6
CODEN: TKSHAI; ISSN: 0371-8808
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Preparation of oryzanol (I) from rice bran oil was investigated. Thus, 288 g. crude rice oil (acid value 65.9) was distilled at <140° and 10-3 mm. pressure by a centrifugal mol. still to give a residue (203 g.) (acid value, 7.4). To the residue (100 g.), 500 mL. EtOH and 500 mL. 20% NaOH aqueous was added, the solution extracted 6 times with 100 mL. n-hexane and neutralized with AcOH, 5% Na₂CO₃ aqueous added, and the solution extracted with ether to give 6.3 g. concentrated solution of I. From the concentrated solution, 1.1 g. crude I, m. 94.5-6.8°, purity 96%, was obtained. Also, 100 g. rice oil was dissolved in 1 L. n-hexane, 200 mL. 2.5% Na₂CO₃-50% alc. solution added, and the upper n-hexane layer separated and washed with MeOH solution of NaOH to give 14.5 g. concentrated I solution. The concentrated I solution (14 g.) was dissolved in 300 mL. Et₂O and the solution washed with 3% aqueous Na₂CO₃-and 10% aqueous EtOH K₂CO₃ to give 2.1 g. crude I (purity, 68.8%).
IT 1259-32-1
(Derived from data in the 7th Collective Formula Index (1962-1966))
RN 1259-32-1 CAPLUS
CN 2-Naphthoic acid, 8-[2-(6,7-dihydroxy-2,5-dimethyl-1-naphthyl)ethyl]-1,2,3,4,4a,5,6,7-octahydro-2,4a,7,7-tetramethyl-, methyl ester, stereoisomer (8CI) (CA INDEX NAME)



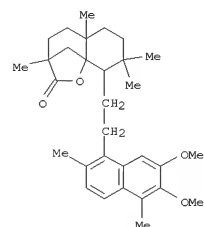
L51 ANSWER 166 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, 1-(piperidinomethyl)-2,7-naphthylene ester (7CI) (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

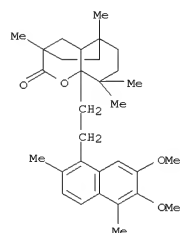
L51 ANSWER 167 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN
 ACCESSION NUMBER: 1963:40179 CAPLUS
 DOCUMENT NUMBER: 58:40179
 ORIGINAL REFERENCE NO.: 58:6872c-h, 6873a-c
 TITLE: Structure of pristimerin, a quinonoid triterpene
 AUTHOR(S): Harada, R.; Kakisawa, H.; Kobayashi, S.; Musya, M.; Nakanishi, K.; Takahashi, Y.
 CORPORATE SOURCE: Tokyo Kyokiku Univ., Otsuka, Bunkyo, Japan
 SOURCE: Tetrahedron Letters (1962) 603-7
 CODEN: TELEAY; ISSN: 0040-4039
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 GI For diagram(s), see printed CA Issue.
 AB cf. CA 50, 13971g. Roots of Tripterium regelii and Celastrus strigillosus were found to be suitable sources of celestrol (tripterine) (I, R = H) (II). RMnO₄ oxidation of pristimerin, C₃₀H₄₀O₄ (I, R = Me) (III) gave the ester anhydride (IV), which dehydrogenated with Se gave a 1,2,6-trialkylphenanthrene, converted to a trinitrobenzoate, m. 140-8°, λ 260, 282, 291, 303.5, 322, 330, 337.5, 345, 353 mμ. This evidence of the presence of a pentacyclic skeleton was supported by production of an allylpicene by Zn dust distillation (loc. cit.).
 The nuclear magnetic resonance (n.m.r.) spectrum of di-Me pristimerol (V, R = Me, R₁ = H₂, R₂ = CO₂Me) (VI) measured in CCl₄ (internal reference Me₃SiOSiMe₃, τ = 9.03) showed 9 Me singlets at 9.41, 8.92, 8.85, 8.77, 8.66, 7.85, 6.52, 6.26, 6.06; allylic CH₂ at 6.87; vinyl proton at 4.27; and an aromatic singlet at 3.35 τ. In oxodimethylpristimerol V (R = Me, R₁ = O, R₂ = CO₂Me) (VII) the 6.87 peak is absent and the 4.27, 7.85 peaks are shifted to 3.87 and 7.40 τ, resp. The shift of 7.85 singlet in VI to 7.40 in VII indicated the presence of an aromatic Me group in the peri position to the C-6 CO group. The appearance of the n.m.r. Me peaks of all derivs. of III as singlets suggested the oleanane type ring E. Treatment of III with 2N H₂SO₄ in N gave the naphthalenoid compds., isopristerimerin-I (VIII, R = H) (IX), m. 207-8°, and isopristerimerin-II (X, R = H, R₁ = Me) (XI), m. 70-5° identical with the hydrolysis product of the so-called Thiele acetate (X, R = Ac, R₁ = Me) (XII) (Grant and Johnson, CA 52, 7261b). The n.m.r. spectrum of IX in CDCl₃ showed an AB type quartet at 2.48, 2.94 τ (J = 8.2 cycles/sec.) superimposed on a singlet at 2.95; 2 aromatic Me singlets at 7.47 and 7.56; and a two-proton doublet at 4.95, 5.09, due to the terminal CH₂ group. The aromatic substitution pattern was supported by clear infrared (IR) peaks at 893, 815 cm.⁻¹ (KBr). IR spectrum in CCl₄ showed bands at 3584, 3400, 1702 cm.⁻¹, shifted to 3600, 3560, 1730 cm.⁻¹ in dioxane. The acetate VIII (R = Ac) (XIII) with masked phenolic OH groups showed the ester band at 1732 cm.⁻¹ (CCl₄) in the normal position. The n.m.r. spectra of the diacetate XII and the di-Me ether X (R = R₁ = Me) were also in full accord with the structures proposed which were also unambiguously supported by the mass spectrometric data. The position of the CO₂Me was considered. III reduced with LiAlH₄ and the product acetylated gave the triacetate V (R = Ac, R₁ = H, R₂ = CH₂OAc), C₃₅H₄₈O₆, m. 103-6°, n.m.r. 6.19, 6.37 (J = 10.5 cycles/sec.) due to a hindered primary OH group, indicating attachment of the CO₂Me group to a quaternary C atom. Several findings suggested the C-20 rather than the possible C-17 position. The acid X (R = Me, R₁ = H) was recovered unchanged after heating 1 hr. at 160° in vacuo, and treatment with HCl formed

L51 ANSWER 167 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)
 lactone (XIII), C₃₁H₄₂O₄, m. 229-30°, ν 1780 cm.⁻¹ (KBr) and lactone (XIV), m. 149-50°, ν 1732 cm.⁻¹ (CCl₄), n.m.r. 8.95, 8.89, 8.85, 8.81 τ (CCl₄). Treatment of celestrol reductive acetate V (R = Ac, R₁ = H₂, R₂ = CO₂H), C₃₃H₄₄O₆, m. 244-6° with Pb(OAc)₄ gave a decarboxylated nor compd. (XV), C₃₂H₄₂O₄, m. 221°, n.m.r. 8.42, 4.87 τ (CCl₄). The stereochem. at ring junctures was derived from logical biogenetic transformations from a β-amyrin type precursor. The C-20 CO₂R group is regarded as α in view of the formation of XIII and XIV.
 IT 1906-20-3P, 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-8a-hydroxy-2,4a,7,7-tetramethyl-, γ-lactone 1906-21-4P, 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-8-hydroxy-2,4a,7,7-tetramethyl-, δ-lactone 88688-15-7P, 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]-1,2,3,4,4a,5,6,7-octahydro-2,4a,7,7-tetramethyl-, methyl ester 96675-77-3P, 2-Naphthoic acid, 8-[2-(6,7-dihydroxy-2,5-dimethyl-1-naphthyl)ethyl]-1,2,3,4,4a,5,6,7-octahydro-2,4a,7,7-tetramethyl-, methyl ester, diacetate
 RL: PREP (Preparation) (preparation of)
 RN 1906-20-3 CAPLUS
 CN 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-8a-hydroxy-2,4a,7,7-tetramethyl-, γ-lactone (7CI, 8CI) (CA INDEX NAME)

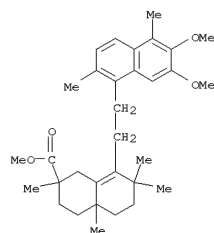


RN 1906-21-4 CAPLUS
 CN 2-Naphthoic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthyl)ethyl]decahydro-8-hydroxy-2,4a,7,7-tetramethyl-, δ-lactone (7CI, 8CI) (CA INDEX NAME)

L51 ANSWER 167 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)

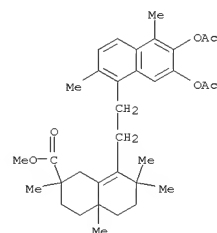


RN 88688-15-7 CAPLUS
 CN 2-Naphthalenecarboxylic acid, 8-[2-(6,7-dimethoxy-2,5-dimethyl-1-naphthalenyl)ethyl]-1,2,3,4,4a,5,6,7-octahydro-2,4a,7,7-tetramethyl-, methyl ester (CA INDEX NAME)



RN 96675-77-3 CAPLUS
 CN 2-Naphthalenecarboxylic acid, 8-[2-[6,7-bis(acetyloxy)-2,5-dimethyl-1-naphthalenyl]ethyl]-1,2,3,4,4a,5,6,7-octahydro-2,4a,7,7-tetramethyl-, methyl ester (CA INDEX NAME)

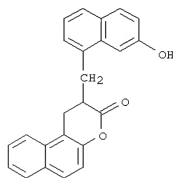
L51 ANSWER 167 OF 176 CAPLUS COPYRIGHT 2010 ACS ON STN (Continued)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
 (3 CITINGS)

L51 ANSWER 168 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1962:31326 CAPLUS
DOCUMENT NUMBER: 56:31326
ORIGINAL REFERENCE NO.: 56:5918a-f
TITLE: Synthesis of 6-halo flavones and related compounds
AUTHOR(S): Chang, C. T.; Chen, F. C.; Chen, T. S.; Hsu, K. K.;
Ueng, T.; Hung, M.
CORPORATE SOURCE: Natl. Taiwan Univ., Taipei, Taiwan
SOURCE: Journal of the Chemical Society (1961) 3414-17
CODEN: JCSOA9; ISSN: 0368-1769
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB The 6-halo flavones, -flavanones, -flavonols, and the corresponding
chalcones were prepared and described. Thus, the p-F-, p-Cl-, and
p-BrC6H4OAc were converted to the corresponding
5-halo-2-hydroxyacetophenones with AlCl3. This reaction yielded only
2,4-diiodophenol with p-IC6H4OAc; 2-hydroxy-5-iodoacetophenone (I) was
prepared by nitration of 2-HOC6H4Ac (Allan and Loudon, CA 44, 630b) to
yield
29% steamvolatile 5-NO2 derivative, m. 101-2°, and 1.9% non-volatile
3-NO2 derivative, m. 84-4.5°, both of which were reduced with SnCl2 and
HCl to obtain the 5-NH2 analog (II), m. 112-13°, HCl salt, m.
230-40°, and the 3-NH2 analog, m. 93-4°; 5 g. II, diazotized
with 2.4 g. NaNO2 in 4 ml. H2O and 20 g. ice in 18 ml. 18N H2SO4 and
treated with 3 ml. H2SO4, 0.1 g. powdered Cu, and 6.3 g. KI in 10 ml. H2O
yielded 7 g. I, m. 91-2°. Also prepared was the 3-iodo isomer of I,
m. 58-9°. I was also prepared by adding 55 g. AlCl3 to a mixture of 20
g. p-MeOC6H4NHAc and 25 ml. AcCl in dry CS2 slowly with stirring, keeping
the mixture at 80-90° 1.5 hrs., and working up to obtain 19.2 g.
5-acetamido-2-hydroxyacetophenone (III), m. 167-8°. Keeping the
mixture at 20-25° 12 hrs. yielded the 2-methoxy analog of III (83%),
which was boiled with an equal weight of AlCl3 in PhCl to yield 90% III.
III
(20 g.), boiled 40 min. with 25 ml. 5% HCl and neutralized with NH4OH
yielded 13.2 g. II, which was treated as before to obtain I. The
following compds. were prepared as described previously (CA 52, 11823h)
(% yields and m.p. given). 5'-Halo-2'-hydroxychalcones and derivs.; 5'-F,
83,
103-4°; 5'-Cl, 90, 111-12°; 5'-Br, 92, 109-10°; 5'-I,
86, 107-8°; 5',4'-F(MeO), 74, 125-6°; 5',4'-Cl(MeO), 71,
111-12°; 5',4'-Br(MeO), 90, 115-16°; 5',4'-I(MeO), 70,
130°. The 6-halo flavanones and derivs.; 6-F, 70, 77-8°;
6-Cl, 50, 96-7°; 6-Br, 60, 118-19°; 6-I, 91, 137°;
6,4'-F(MeO), 50, 88-9°; 6,4'-Cl(MeO), 45, 106-6.5°;
6,4'-Br(MeO), 40, 111.5-12.5°; 6,4'-I(MeO), 58, 112°. The
6-halo flavones and derivs. (prepared by the SeO2 method); 6-F, 53,
128-9°; 6-Cl, 61, 182-3°; 6-Br, 42, 189-90°; 6-I, 74,
190-1°; 6,4'-F(MeO), 50, 159-60°; 6,4'-Cl(MeO), 77,
180-1°; 6,4'-Br(MeO), 76, 192-3°; 6,4'-I(MeO), 71,
183°. The 6-halo flavonols and derivs.; 6-F, -, 163-5°;
6-Cl, -, 1623°; 6-Br, 183-4° (acetate m. 143-4°); 6-I,
-, 191-2° (acetate m. 175-6°); 6,4'-F(MeO), -,
207-8°; 6,4'-Cl(MeO), -, 205-6° (acetate m. 160-1°);
6,4'-Br(MeO), -, 193-4°; 6,4'-I(MeO), -, 179-80° (acetate m.
187-8°).
IT 88856-21-7
(Derived from data in the 7th Collective Formula Index (1962-1966))
RN 88856-21-7 CAPLUS
CN 3H-Naphtho[2,1-b]pyran-3-one, 1,2-dihydro-2-[(7-hydroxy-1-

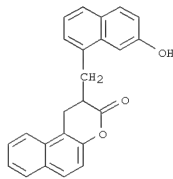
L51 ANSWER 168 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
naphthalenyl)methyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS
RECORD
(5 CITINGS)

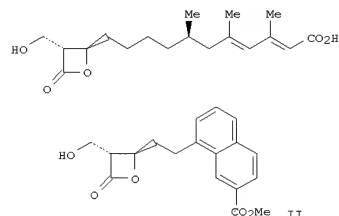
L51 ANSWER 169 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1962:31325 CAPLUS
DOCUMENT NUMBER: 56:31325
ORIGINAL REFERENCE NO.: 56:5917g, 5918a
TITLE: Condensation of phenolic Mannich bases with active H
derivatives. II. 3,3'-spirobis(5,6-benzo-
3,4-dihydrocoumarin)
AUTHOR(S): Molho, Darius; Gerphagnon, Marie-Cecile
SOURCE: Bulletin de la Societe Chimique de France (1961)
1424-8
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB 1-Piperidinomethyl- 2-naphthol (5 g.) and 3.5 g. diethyl malonate were
heated 3/4 hr. at 180-200°. Treatment of the cool reaction mass
with alc. precipitated 3,3'-spirobis(5,6-benzo-3,4-dihydrocoumarin) (I),
m.
278° (HOAc), αD 0.0046°. Similarly, 5 g.
1-piperidinobenzyl-2-naphthol and 2.7 g. diethyl malonate gave
3,3'spirobis(5,6-benzo-4-phenyl-3,4-dihydrocoumarin), m. 240°
(HOAc). I (500 mg.) in 150 cc. anhydrous acetone were refluxed with 600
mg.
(Me)2SO4 in the presence of 3 g. K2CO3 24 hrs. Filtration and
evaporation gave
300 mg. Me ester of bis(2-methoxynaphthyl)acetic acid (II), m. 105°
(EtOH). II (250 mg.) refluxed 2 hrs. with 0.5N KOEt gave 190 mg.
bis(2-methoxynaphthyl)acetic acid, m. 195° (EtOH). The diethyl
ester of 2-methoxynaphthyl malonic acid (III), m. 56°, was prepared
from 1-chloromethyl-2-methoxynaphthalene. When 1-chloromethyl-2-naphthol
was the starting material, only resinous products were obtained. III (4
g.) in 5 cc. anhydrous benzene refluxed 3 hrs. with 1.25 g. Et malonate,
0.4
g. K, 15 cc. anhydrous benzene, and 2.5 g. tert-BuOH gave, after washing
with
dilute HCl, NaHCO3, and H2O and distillation in vacuo, diethyl
bis(2-methoxynaphthyl)malonate (IV), m. 95°, in 20% yield. IV (35%)
was obtained by starting directly with
1-chloromethyl-2-methoxynaphthalene. The same reaction in the presence
of
NaOEt gave 2-methoxynaphthylmalonic acid, m. 174°. Decarboxylation
gave β-(2-methoxynaphthyl)propionic acid, m. 131°. IV (150
mg.) in 10 cc. HOAc, 2 cc. III, and a little red P refluxed 2 hrs.,
treated with H2O, NaHSO3, filtered, crystallized from HOEt, and sublimed
gave
3-(2-hydroxynaphthyl)-5,6-benzo-3,4-dihydrocoumarin, m. 221°.
IT 88856-21-7P, 1-Naphthalenepropionic acid,
2-hydroxy-α-[(7-hydroxy-1-naphthyl)methyl]-, 8-lactone
RL: PREP (Preparation)
(preparation of)
RN 88856-21-7 CAPLUS
CN 3H-Naphtho[2,1-b]pyran-3-one, 1,2-dihydro-2-[(7-hydroxy-1-
naphthalenyl)methyl]- (CA INDEX NAME)

L51 ANSWER 169 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



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L51 ANSWER 110 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1994:655450 CAPLUS
 DOCUMENT NUMBER: 121:255450
 ORIGINAL REFERENCE NO.: 121:46627a,46630a
 TITLE: Synthesis and biological activity of new 3-hydroxy-3-methylglutaryl coenzyme A (HMG-CoA) synthase inhibitors: 2-oxetanones with a side chain mimicking the folded structure of 1233A
 AUTHOR(S): Hashizume, Hirokazu; Ito, Hajime; Yamada, Kohji; Nagashima, Hajime; Kanao, Munefumi; Tomoda, Hiroshi; Sunazuka, Toshiaki; Kumagai, Hidetoshi; Omura, Satoshi
 CORPORATE SOURCE: Fuji Chem. Ind. Ltd., Takaoka, 933, Japan
 SOURCE: Chemical & Pharmaceutical Bulletin (1994), 42(3), 512-20
 CODEN: CPBTAL; ISSN: 0009-2363
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



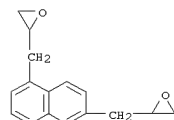
AB To mimic the folded side chain conformation of 1233A (I), which is a 3-hydroxy-3-methylglutaryl CoA (HMG-CoA) synthase inhibitor, 1233A analogs with aromatic rings in the side chain were prepared. The 2-oxetanone moiety was kept intact. Among 1233A and its synthetic analogs, trans-3-(hydroxymethyl)-4-[2-(7-methoxycarbonyl-1-naphthyl)ethyl]-2-oxetanone (II) showed the highest HMG-CoA synthase inhibitory activity in vitro. The structure-activity relation at the side chain is discussed.
 IT 136434-48-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as intermediate for antibiotic 1233 analog HMG-CoA synthase inhibitor)
 RN 136434-48-5 CAPLUS
 CN 2-Naphthalenecarboxylic acid, 8-[2-[4-oxo-3-[(triphenylmethoxy)methyl]-2-oxetanyl]ethyl]-, methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

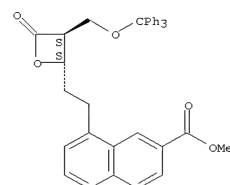
L51 ANSWER 111 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1994:437315 CAPLUS
 DOCUMENT NUMBER: 121:37315
 ORIGINAL REFERENCE NO.: 121:6879a,6882a
 TITLE: Epoxy resin compositions for semiconductor sealants
 INVENTOR(S): Tsutsumi, Yasuaki; Kayaba, Keiji; Tanaka, Masayuki
 PATENT ASSIGNEE(S): Toray Industries, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06032869	A	19940208	JP 1992-190336	19920717
PRIORITY APPLN. INFO.:			JP 1992-190336	19920717

AB The title comps., with good crack, solder heat, and humidity resistance, contain (A) epoxy resins, (B) hardeners, (C) 60-95% (vs. total amount) fillers, (D) modified styrene block copolymers obtained by polymerizing or grafting styrene block copolymers with unsatd. carboxylic acid (derivs.), and (E) 0.02-30% (vs. total amount) inorg. ion-exchangers
 $MxOr(NO_3)z(OH)w.nH_2O$ ($M = \geq 1$ transition metals with 3-5 valency; $x = 1-5$; $r = 1-7$; $z = 0.2-3.0$; $w = 0.2-3.0$; $n = 0.2$). Thus, a composition comprising o-cresol novolak epoxy resin 7.5, phenol novolak 4.1, crushed SiO_2 84, hydrogenated maleic acid-grafted polystyrene-polybutadiene-polystyrene block copolymer (0.2% maleation, polystyrene/polybutadiene = 30/70) 2.0, Sb2B11.506.2(OH)1.2(NO3)0.3.0.5H2O 1.0, brominated phenol novolak 2.5, Sb2O3 2.0, Ph3P 0.1, carnauba wax 0.3, carbon black 0.3, and γ -glycidoxypropyltrimethoxysilane 0.7 part was melt kneaded, crushed, and transfer-molded to give test pieces showing 50%-malfunction time 1600 h (pressure cooker test).
 IT 145386-40-9
 RL: USES (Uses)
 (phenol novolak-crosslinked, sealants, containing modified styrene polymers and inorg. ion exchangers, for semiconductor devices)
 RN 145386-40-9 CAPLUS
 CN Oxirane, 2,2'-[1,6-naphthalenediylbis(methylene)]bis- (9CI) (CA INDEX NAME)



L51 ANSWER 110 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

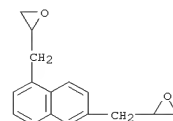


OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L51 ANSWER 112 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1994:325412 CAPLUS
 DOCUMENT NUMBER: 120:325412
 ORIGINAL REFERENCE NO.: 120:57245a,57248a
 TITLE: Epoxy resin potting compositions for semiconductor devices
 INVENTOR(S): Tsutsumi, Yasuaki; Kayaba, Keiji; Tanaka, Masayuki
 PATENT ASSIGNEE(S): Toray Industries, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06037212	A	19940210	JP 1992-190396	19920717
JP 3116577	B2	20001211		
PRIORITY APPLN. INFO.:			JP 1992-190396	19920717

AB Potting comps. contain epoxy resins, hardening agents, fillers, styrene block copolymers grafted with unsatd. carboxylic acids or their deriva. for improving solder heat resistance, and 0.01-10% hydrotalcite. Thus, hydrogenated butadiene-styrene block copolymer grafted with 0.5% maleic acid was used in potting comps.
 IT 145386-40-9
 RL: USES (Uses)
 (potting comps., containing styrene block copolymers grafted with unsatd. carboxylic acids and hydrotalcite)
 RN 145386-40-9 CAPLUS
 CN Oxirane, 2,2'-[1,6-naphthalenediylbis(methylene)]bis- (9CI) (CA INDEX NAME)



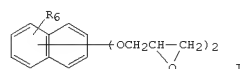
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L51 ANSWER 113 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:136481 CAPLUS
DOCUMENT NUMBER: 120:136481
ORIGINAL REFERENCE NO.: 120:24041a,24044a
TITLE: Solder heat-, thermal shock-, and moisture-resistant epoxy resin potting compositions
INVENTOR(S): Sawamura, Taiji; Teshiba, Toshihiro; Tanaka, Masayuki
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04202518	A	19920723	JP 1990-339719	19901130
JP 2955012	B2	19991004		

PRIORITY APPLN. INFO.: JP 1990-339719 19901130

GI



AB The title compns. comprise (A) epoxy resins, (B) hardeners, (C) fillers, and (D) polystyrene type-block copolymers, where the epoxy resins contain an essential component of I (R6 = H, halogen, C1-4 alkyl). A composition contained 1,6-diglycidynaphthalene 8.76, phenolic novolak resin 7.21, Ph3P 0.23, stearic acid 0.30, brominated phenolic novolak epoxy resin 2.30, Sb2O3 1.50, carbon black 0.20, fused silica 77.0, γ -glycidioxypropyltrimethoxysilane 1.00, and hydrogenated styrene-butadiene triblock copolymer 1.50 part.

IT 145386-40-9D, polymers with epoxy resins
RL: USES (Uses)
(potting compns. containing, heat-, moisture-, and thermal shock-resistant)

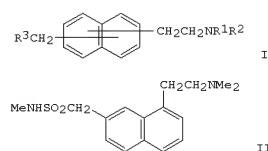
RN 145386-40-9 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(methylene)]bis- (9CI) (CA INDEX NAME)

L51 ANSWER 114 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:670825 CAPLUS
DOCUMENT NUMBER: 119:270825
ORIGINAL REFERENCE NO.: 119:48453a,48456a
TITLE: Preparation of naphthalene amides and sulfonamides, their pharmaceutical formulations, and their affinity for serotonergic receptors
INVENTOR(S): Depreux, Patrick; Lesieur, Daniel; Abdellaoui, Habib; Guardiola, Beatrice; Adam, Gerard; Renard, Pierre; Pfeiffer, Bruno
PATENT ASSIGNEE(S): Adir et Cie., Fr.
SOURCE: Eur. Pat. Appl., 50 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 553016	A1	19930728	EP 1993-400111	19930119
EP 553016	B1	19970507		
FR 2686339	A1	19930723	GB, GR, IE, IT, LI, LU, NL, PT, SE	19920122
FR 2686339	B1	19940311		
AT 152707	T	19970515	AT 1993-400111	19930119
ES 2103440	T3	19970916	ES 1993-400111	19930119
CA 2087772	A1	19930723	CA 1993-2087772	19930121
AU 9331912	A	19930729	AU 1993-31912	19930121
AU 654753	B2	19941117		
US 5332759	A	19940726	US 1993-9922	19930121
ZA 9300494	A	19930823	ZA 1993-494	19930122
JP 06025128	A	19940201	JP 1993-43149	19930122
JP 0609448	B	19941124		

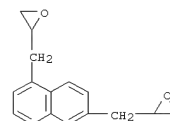
PRIORITY APPLN. INFO.: FR 1992-608 A 19920122

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 119:270825
GI



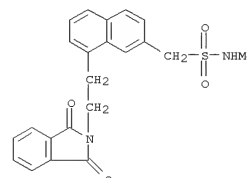
AB Title compns. I [R1, R2 = H, C1-6 alkyl, C3-7 cycloalkyl, cycloalkyl-(C1-4)alkyl, C2-6 alkenyl, (substituted) aryl, (substituted) aryl-(C1-3)alkyl, or NR1R2 form various heterocycles; R3 = R6R7NSO2 or R6R7NCO, where R6,R7 are defined as R1,R2 above], their isomers, and salts

L51 ANSWER 113 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



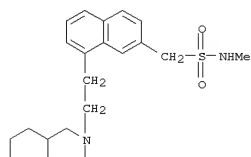
L51 ANSWER 114 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
are prep., and are useful as vasoconstrictors for the treatment of troubles due to vasodilation of the vascular system, in particular, migraine headaches. Thus, the bromomethyl group in 1-acetyl-7-(bromomethyl)naphthalene was first converted to a MeNHSO2CH2 group in 3 steps, then the acetyl group was converted to a Me2NCH2CH2 group in 3 steps to give title sulfonamide II. Compd. II exhibited an affinity for 5HT1D receptors on the order of 10-7 M, whereas its affinity for other serotonergic receptors was 10-6-10-5 M, and affinity for dopaminergic or adrenergic receptors, only 10-5 M. Compd. II exhibited vasoconstrictor potency EC50 on the order of 10-6 M in the vasoconstriction of basilar artery in dog. A pharmaceutical formulation contg. compd. II is given.

IT 151055-31-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of naphthalene amide and sulfonamide)
vasoconstrictors)
RN 151055-31-1 CAPLUS
CN 2-Naphthalenemethanesulfonamide,
8-[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)ethyl]-N-methyl- (CA INDEX NAME)

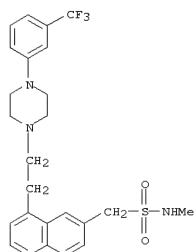


IT 151055-34-4P 151055-36-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as vasoconstrictor with affinity for serotonergic receptors)
RN 151055-34-4 CAPLUS
CN 2-Naphthalenemethanesulfonamide,
8-[2-(hexahydrocyclopenta[c]pyrrol-2(1H)-yl)ethyl]-N-methyl- (CA INDEX NAME)

L51 ANSWER 114 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 151055-36-6 CAPLUS
CN 2-Naphthalenemethanesulfonamide, N-methyl-8-[2-[4-[3-(trifluoromethyl)phenyl]-1-piperazinyl]ethyl]-, hydrochloride (1:7) (CA INDEX NAME)



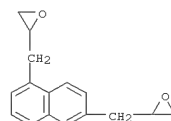
OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD
(6 CITINGS)

L51 ANSWER 115 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:519131 CAPLUS
DOCUMENT NUMBER: 119:119131
ORIGINAL REFERENCE NO.: 119:21425a, 21428a
TITLE: Fire-resistant epoxy resin compositions for semiconductor sealants
INVENTOR(S): Kayaba, Keiji; Ootomo, Shigeru; Tanaka, Masayuki
PATENT ASSIGNEE(S): Toray Industries, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05025364	A	19930202	JP 1991-177038	19910717

PRIORITY APPLN. INFO.: JP 1991-177038 19910717

AB The title comps. with excellent high-temperature reliability comprise epoxy resins, hardeners, 60-95% fillers, 0.01-10% hydrotalcites, Br compds., Sb compds., and 0.01-10% inorg. ion exchangers MxOy(NO3)z(OH)w.nH2O (M = 3-5 valent transition metal; x = 1-5; yr = 1-7; z, w = 0.2-3; n = 0-2). Thus, test pieces, manufactured by transfer molding of a composition containing o-cresol novolak epoxy resin 14.0, phenol novolak resin 8.9, amorphous silica 70.0, Mg4.5Al2(OH)13CO3.3.5H2O 0.3, brominated phenol novolak epoxy resin 2.8, Sb2O3 2.0, and Sb2Bi1.5O6.2(OH)1.2(NO3)0.3.0.5H2O 0.5%, showed UL-94 flame retardance V-0 and good high-temperature reliability.
IT 145386-40-9
RL: USES (Uses) (phenolic resin-crosslinked, sealants, fire- and heat-resistant, for semiconductors)
RN 145386-40-9 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(methylene)]bis- (9CI) (CA INDEX NAME)

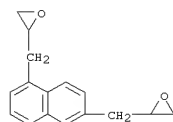


L51 ANSWER 116 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:518637 CAPLUS
DOCUMENT NUMBER: 119:118637
ORIGINAL REFERENCE NO.: 119:21357a, 21360a
TITLE: Heat-resistant epoxy resin compositions
INVENTOR(S): Kitahara, Mikio; Machida, Koichi; Kubo, Takayuki; Torikai, Motoyuki; Asahina, Kotaro; Tanaka, Juntsuke
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04337316	A	19921125	JP 1991-110032	19910515

PRIORITY APPLN. INFO.: JP 1991-110032 19910515

OTHER SOURCE(S): MARPAT 119:118637
AB The title comps., useful for insulating, laminating, potting, etc., comprise (a) bis(diglycidynaphthyl)methane prepared by reacting dihydroxynaphthalene with formaldehyde then with epichlorohydrin, (b) phenolic resins containing ≥ 2 OH/mol., and (c) inorg. fillers. Thus, test pieces prepared from a reaction product (I) of bis(1,6-dihydroxynaphthyl)methane and epichlorohydrin 11.3, BREN-S (brominated phenol novolak epoxy resin) 0.8, PN-80 7.9, silica 80, and other additives 2.55 parts showed flexural strength 4.9 kg/mm² and crack resistance (number of defects) 2/20, vs. 1.5, and 18/20, resp., for EOEN-1020 instead of I.
IT 149478-69-3P
RL: PREP (Preparation) (preparation of, potting comps. containing)
RN 149478-69-3 CAPLUS
CN Oxirane, 2,2',2'',2'''-[methylenebis[7,1,6-naphthalenetriylbis(methylene)]]tetrakis- (9CI) (CA INDEX NAME)



1/2 [D1-CH2-D1]

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

L51 ANSWER 116 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

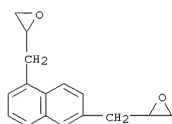
L51 ANSWER 117 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:474269 CAPLUS
DOCUMENT NUMBER: 119:74269
ORIGINAL REFERENCE NO.: 119:13380h,13381a
TITLE: Fire-resistant epoxy resin compositions for semiconductor sealants
INVENTOR(S): Kayaba, Keiji; Ito, Kazuo; Tanaka, Masayuki
PATENT ASSIGNEE(S): Toray Industries, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05025365	A	19930202	JP 1991-177037	19910717
JP 2501149	B2	19960529		

PRIORITY APPLN. INFO.: JP 1991-177037 19910717

AB The title comps. with excellent high-temperature reliability comprise epoxy resins, hardeners, 60-95% fillers, 0.01-10% hydrotalcites, Br compds., 0.01-10% Sb2O4. Thus, test pieces, manufactured by transfer molding of a composition containing o-cresol novolak epoxy resin 15.3, phenol novolak resin 8.9, amorphous silica 70.0, Mg4.5Al2(OH)13CO3.3.5H2O 0.3, brominated bisphenol A-based epoxy resin 2.0, Sb2O4 0.5, and Sb2O3 1.5%, showed UL-94 flame retardance V-0 and good high-temperature reliability.

IT 145386-40-9
RL: USES (Uses)
(phenolic resin-crosslinked, sealants, fire- and heat-resistant, for semiconductors)
RN 145386-40-9 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(methylene)]bis- (9CI) (CA INDEX NAME)

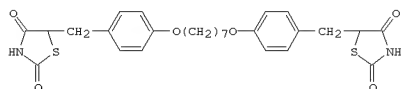


L51 ANSWER 119 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:407910 CAPLUS
DOCUMENT NUMBER: 117:7910
ORIGINAL REFERENCE NO.: 117:1599a,1602a
TITLE: Preparation of bisheterocyclic compounds as hypoglycemic agents
INVENTOR(S): Niigata, Kunihiko; Takahashi, Takumi; Iwaoka, Kiyoshi;
Yoneda, Takashi; Noshiro, Osamu; Koike, Reiko
PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9200967	A1	19920123	WO 1991-JP887	19910701
W: AU, CA, FI, HU, JP, KR, NO, PL, SU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
CA 2086606	A1	19920104	CA 1991-2086606	19910701
AU 9180795	A	19920204	AU 1991-80795	19910701
AU 650465	B2	19940623		
EP 533933	A1	19930331	EP 1991-912078	19910701
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
HU 65619	A2	19940728	HU 1992-4176	19910701
NO 9205056	A	19930224	NO 1992-5056	19921230

PRIORITY APPLN. INFO.: JP 1990-176550 A 19900703
JP 1991-114184 A 19910222
WO 1991-JP887 A 19910701

OTHER SOURCE(S): MARPAT 117:7910
GI

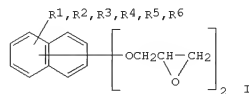


AB RIZ1L1AL 2(Z2)nR2 [I; R1, R2 = 5-membered heterocyclmethyl containing 2-4 hetero atoms; A = single bond, linear or branched alkylene, C2-6 alkenylene, alkynylene; L1, L2 = single bond, O, S, SO, SO2; Z1, Z2 = (alkyl-substituted) benzene or naphthalene; n = 0, 1] are prepared
Reduction of
1,7-bis(p-nitrophenoxy)heptane with Raney Ni gave the diamine derivative, which was diazotized in HCl and treated with Me acrylate in the presence of Cu2O, the residue after evaporation in vacuo was extracted with H2O and Et2O, the dried Et2O was distilled, the residue was dissolved in EtOH and heated

L51 ANSWER 118 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:104231 CAPLUS
DOCUMENT NUMBER: 118:104231
ORIGINAL REFERENCE NO.: 118:18235a,18238a
TITLE: Solder heat-, thermal shock-, and moisture-resistant epoxy resin potting compositions
INVENTOR(S): Sawamura, Taiji; Teshiba, Toshihiro; Tanaka, Masayuki
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
PATENT INFORMATION:

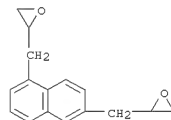
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04202518 A		19920723	JP 1990-339719	19901130

GI

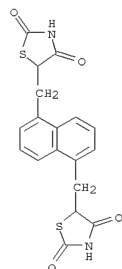


AB The title comps. comprise (A) epoxy resins, (B) hardeners, (C) fillers, and (D) polystyrene type-block copolymers, where the epoxy resins contain an essential component of I (R-6 = H, halogen, C1-4 alkyl). A composition contained 1,6-diglycidynaphthalene 8.76, phenolic novolak resin 7.21, Ph3P 0.23, stearic acid 0.30, brominated phenolic novolak epoxy resin 2.30, Sb2O3 1.50, carbon black 0.20, fused silica 77.0, γ-glycidioxypropyltrimethoxysilane 1.00, and hydrogenated styrene-butadiene triblock copolymer 1.50 part.

IT 145386-40-9
RL: USES (Uses)
(potting comps., heat-, moisture-, and thermal shock-resistant)
RN 145386-40-9 CAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(methylene)]bis- (9CI) (CA INDEX NAME)



L51 ANSWER 119 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
with thiourea and NaOAc at 140°, the mixt. was further heated with 4N HCl at 140° to give bisheterocyclic compd. II, which showed 37% inhibition of blood sugar at 100 mg/kg orally in mice. Also prepd. and tested were 39 addnl. I.
IT 141717-04-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as hypoglycemic agent)
RN 141717-04-6 CAPLUS
CN 2,4-Thiazolidinedione, 5,5'-[1,5-naphthalenediylbis(methylene)]bis- (9CI) (CA INDEX NAME)



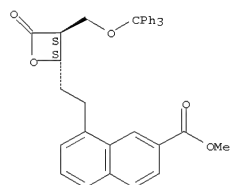
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L51 ANSWER 120 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:235425 CAPLUS
DOCUMENT NUMBER: 116:235425
ORIGINAL REFERENCE NO.: 116:39869a,39872a
TITLE: Preparation of β -lactone derivatives as
anticholesteremics
INVENTOR(S): Omura, Satoshi; Okuda, Shigenobu; Nagase, Osamu;
Nakamoto, Shinichi; Hashizume, Hiroichi
PATENT ASSIGNEE(S): Kitasato Institute, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 47 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03115274	A	19910516	JP 1990-154917	19900613
PRIORITY APPLN. INFO.:			JP 1989-150153	A1 19890613

OTHER SOURCE(S): MARPAT 116:235425
GI For diagram(s), see printed CA Issue.
AB β -Lactone derivs. [L, R = H, alkyl, aryl, acyl, aralkyl; X = (substituted) alkylene, alkenylene; A = alicyclic aryl, heterocyclyl, etc.] and their pharmaceutically acceptable salts, effective HMG-CoA reductase inhibitors useful as anticholesteremics, are prepared Hydrogenolysis of ester (erythro)-II (R1 = PhCH2) over 5% Pd-C in MeOH gave 34.8% and (erythro)-II (R1 = H), which was dissolved in pyridine and treated with P-MeC6H4SO2Cl with stirring to give 94.2% trans-III. Also prepared were 154 addnl. I which showed IC50 of 0.05-0.62 μ M against HMG-CoA reductase.
IT 136417-74-8P 136417-75-9P 136417-76-0P
136417-77-1P 136434-48-5P
RI: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anticholesteremic agent)
RN 136417-74-8 CAPLUS
CN 2-Naphthalenecarboxylic acid, 8-[2-[(2S,3S)-4-oxo-3-[(triphenylmethoxy)methyl]-2-oxetanyl]ethyl]-, methyl ester (CA INDEX NAME)

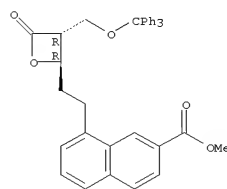
Absolute stereochemistry. Rotation (-).



RN 136417-75-9 CAPLUS
CN 2-Naphthalenecarboxylic acid, 8-[2-[(2R,3R)-4-oxo-3-

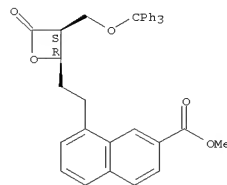
L51 ANSWER 120 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
[(triphenylmethoxy)methyl]-2-oxetanyl]ethyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 136417-76-0 CAPLUS
CN 2-Naphthalenecarboxylic acid, 8-[2-[(2R,3S)-4-oxo-3-[(triphenylmethoxy)methyl]-2-oxetanyl]ethyl]-, methyl ester (CA INDEX NAME)

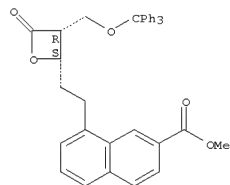
Absolute stereochemistry. Rotation (+).



RN 136417-77-1 CAPLUS
CN 2-Naphthalenecarboxylic acid, 8-[2-[(2S,3R)-4-oxo-3-[(triphenylmethoxy)methyl]-2-oxetanyl]ethyl]-, methyl ester (CA INDEX NAME)

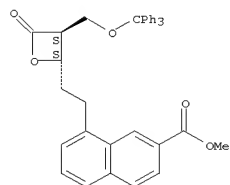
Absolute stereochemistry. Rotation (-).

L51 ANSWER 120 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 136434-48-5 CAPLUS
CN 2-Naphthalenecarboxylic acid, 8-[2-[4-oxo-3-[(triphenylmethoxy)methyl]-2-oxetanyl]ethyl]-, methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



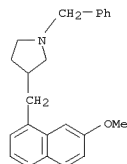
L51 ANSWER 121 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:128683 CAPLUS
DOCUMENT NUMBER: 116:128683
ORIGINAL REFERENCE NO.: 116:21783a,21786a
TITLE: Novel piperidine, tetrahydropyridine, and pyrrolidine derivatives useful as antihypertensives, process for their preparation, and pharmaceutical compositions containing them
INVENTOR(S): Lavielle, Gilbert; Laubie, Michel; Colpaert, Francis
PATENT ASSIGNEE(S): ADIR et Cie., Fr.
SOURCE: Eur. Pat. Appl., 57 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 466585	A1	19920115	EP 1991-401915	19910710
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
FR 2664592	A1	19920117	FR 1990-8729	19900710
FR 2664592	B1	19940902		
US 5250544	A	19931005	US 1991-723757	19910701
CA 2046495	A1	19920111	CA 1991-2046495	19910709
AU 9180251	A	19920116	AU 1991-80251	19910709
AU 635851	B2	19930401		
ZA 9105326	A	19920527	ZA 1991-5326	19910709
JP 04230362	A	19920819	JP 1991-168266	19910709
JP 07113013	B	19951206		
US 5278185	A	19940111	US 1992-971342	19921104
US 5240942	A	19930831	US 1992-972125	19921105
US 5242933	A	19930907	US 1992-972126	19921105
US 5260317	A	19931109	US 1992-972127	19921105
US 5292761	A	19940308	US 1992-972120	19921105
PRIORITY APPLN. INFO.:			FR 1990-8729	A 19900710
			US 1991-723757	A3 19910701

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

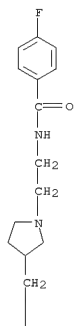
OTHER SOURCE(S): MARPAT 116:128683
AB Title compds. R1ABR2 [I; R1 = (un)substituted 1-naphthyl or its 3,4-dihydro or 1,2,3,4-tetrahydro derivs., 3-quinolyl, 1,4-benzodioxan-5-yl; A = single or double bond, CH2, CH; B = piperidyl, pyrrolidinyl, 1,2,3,6-tetrahydropyridyl, all bound to A at a C atom and to R2 at the N atom; R2 = H, CH2Ph, alkyl, aminoalkyl, cyanoalkyl, benzamidoalkyl; with a variety of provisos and conditions] and salts, having 5-HT1A receptor activity, were prepared as antihypertensives and possibly for addnl. uses. For example, lithiation of 1-bromonaphthalene and reaction with 1-methylpiperid-4-one (73%), followed by dehydration of the resulting alc. in 48% HBr (86.6%), gave 1-methyl-4-(1-naphthyl)-1,2,3,4-tetrahydropyridine HBr salt, a title compound This was sequentially converted to addnl. I by hydrogenation, demethylation, N-alkylation with BrCH2CN, etc. As an example using anesthetized dogs, two compds. I showed antihypertensive activity comparable or superior to both racemic and (+)-flesinoxan. Over 30 synthetic examples, 1H-NMR data for various I and intermediates, and a receptor assay are described.
IT 139420-03-4P 139420-07-8P

L51 ANSWER 121 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of, as antihypertensive)
 RN 139420-03-4 CAPLUS
 CN Pyrrolidine, 3-[(7-methoxy-1-naphthalenyl)methyl]-1-(phenylmethyl)- (CA INDEX NAME)



RN 139420-07-8 CAPLUS
 CN Benzamide, 4-fluoro-N-[2-[3-[(7-methoxy-1-naphthalenyl)methyl]-1-pyrrolidinyl]ethyl]- (CA INDEX NAME)

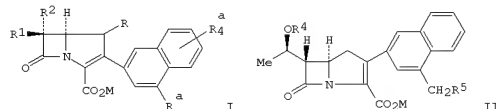
PAGE 1-A



L51 ANSWER 122 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1992:59076 CAPLUS
 DOCUMENT NUMBER: 116:59076
 ORIGINAL REFERENCE NO.: 116:10213a,10216a
 TITLE: Preparation of naphthylcarbapenems as antibiotics and antibacterials
 INVENTOR(S): DiNinno, Frank P.; Greenlee, Mark L.
 PATENT ASSIGNEE(S): Merck and Co., Inc., USA
 SOURCE: U.S., 45 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5032587	A	19910716	US 1990-551699	19900711
EP 466254	A1	19920115	EP 1991-201706	19910703
R: CH, DE, FR, GB, IT, LI, NL				
CA 2046524	A1	19920112	CA 1991-2046524	19910709
JP 04253980	A	19920909	JP 1991-171353	19910711
JP 07098820	B	19951025		
PRIORITY APPLN. INFO.:			US 1990-551699	A 19900711
			US 1990-594213	A 19910109

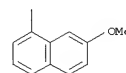
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
 OTHER SOURCE(S): MARPAT 116:59076
 GI



AB Title compds. [I; M = H, ester residue, cation, neg. charge, etc.; R = H, Me; R1, R2 = H, Me, Et, CH2OH, MeCH(OH), etc.; 1 of Ra = [(CH2)mQ(CH2)n]pR3, etc., and the others = H, CF3, halo, OH, alkoxy, cyano, etc.; Q = bond, O, S, NH, CO, CH:CH, etc.; when p = 1, m = 0-6, and n = 1-6, R3 = pyridinium-1-yl, quinolinium-1-yl, etc.; when p = 1, m = 0-6, and n = 0-6, R3 = pyridyl, quinolyl, etc.] were prepared as antibiotics and antibacterials (no data). Thus, (3S, 4R)-1-(allyloxy-carbonyltriphenylphosphoranylidene)methyl-3-[(R)-1-(allyloxy-carbonyloxy)ethyl]-4-[(2-pyridylthio)carbonyl]methylazetidin-2-one was condensed with the Grignard reagent from 3-bromo-1-(tert-butyl-dimethylsilyloxymethyl)naphthalene and the deprotected product cyclized to give title compound II (M = allyl, R4 = CH2CH2O2C) (III; R5 = OH) which was converted in 2 steps to III (R5 = iodo). The latter was condensed with 4-aminopyridine to give, after deprotection, III (M = neg. charge, R4 = H, R5 = 4-aminopyridinium-1-yl).

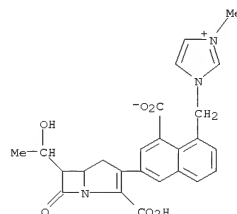
L51 ANSWER 121 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

PAGE 2-A



OS.CITING REF COUNT: 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS RECORD (48 CITINGS)

L51 ANSWER 122 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
 IT 136948-09-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as antibiotic and antibacterial)
 RN 136948-09-9 CAPLUS
 CN 1H-Imidazolium, 1-[[[8-carboxy-6-[2-carboxy-6-(1-hydroxyethyl)-7-oxo-1-azabicyclo[3.2.0]hept-2-en-3-yl]-1-naphthalenyl]methyl]-3-methyl-, inner salt, monopotassium salt, [5R-[5a,6a(R*)]]- (9CI) (CA INDEX NAME)

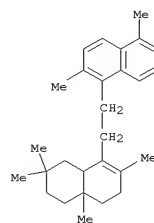


● K

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
 REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

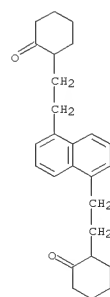
L51 ANSWER 123 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1991:636044 CAPLUS
 DOCUMENT NUMBER: 115:236044
 ORIGINAL REFERENCE NO.: 115:40193a,40196a
 TITLE: Changes to unbound biomarkers in low-rank coals during simulated coalification
 AUTHOR(S): Li, Maowen; Wang, Peirong; Johns, R. B.
 CORPORATE SOURCE: Sch. Chem., Univ. Melbourne, Parkville, 3052, Australia
 SOURCE: Energy & Fuels (1991), 5(6), 885-95
 CODEN: ENFUEM; ISSN: 0887-0624
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A sample of immature Victorian brown coal (Ro = 0.31%) was subjected to anhydrous and hydrous pyrolysis at 200-300° to observe induced structural changes in unbound biomarkers present in the raw coal. Hopanoid hydrocarbons are predominant in the raw coal and occur as the 22R isomers. Although Ro increased to 0.99% at 300°, isomerization to the 22S epimer was not observed; instead, increasing aromatization and degradation to bicyclic aroms. occurred. $\beta\beta$ -Homohopane was generated by hydrous pyrolysis at 250°, whereas 17 α (H),21 β (H)-homohopane decreased at 200-300°. The interrelationship between these maturity indicators may need an explanation. C32 and C33 benzohopanes were formed in optimal yield at 250° but not at 300°, from the unbound precursor(s). This result substantiates a geochem. pathway during diagenesis for benzohopane formation in addition to a microbial degradation pathway already discussed in the literature. A detailed structural anal. of alkyl-naphthalenes, indanes, and Tetralins related them to a wide range of 8,14-secotetracyclic aromatic hydrocarbons which, in part, are believed to be their probable precursors. In turn, these seco compds. relate structurally to pentacyclic triterpenoid precursors with skeletons of the oleanane, lupane, ursane, and hopane classes recognized in the unbound fraction in the raw coal. The seco compds. occur with all degrees of aromatization. Beginning with β -amyrin as representative, probable pathways to bicyclic aroms. are proposed on the basis of identified intermediates. Products released by hydrous pyrolysis of the coal suggest that the coal itself acts as an acidic catalytic surface. Catalytic effects are more pronounced under anhydrous than under hydrous conditions.
 IT 94613-97-5P
 RL: FORM (Formation, nonpreparative); PREP (Preparation) (formation of, in hydrous pyrolysis of brown coal, in artificial coalification study)
 RN 94613-97-5 CAPLUS
 CN 24,25-Dinor-8,14-secooleana-1,3,5,7,9,13-hexaene (9CI) (CA INDEX NAME)

L51 ANSWER 123 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

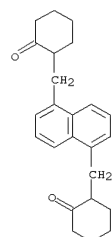


L51 ANSWER 124 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1991:61668 CAPLUS
 DOCUMENT NUMBER: 114:61668
 ORIGINAL REFERENCE NO.: 114:10567a,10570a
 TITLE: A new general synthesis of polycyclic aromatic compounds based on enamine chemistry
 AUTHOR(S): Harvey, Ronald G.; Pataki, John; Cortez, Cecilia; Di Raddo, Pasquale; Yang, Cheng Xi
 CORPORATE SOURCE: Ben May Inst., Univ. Chicago, Chicago, IL, 60637, USA
 SOURCE: Journal of Organic Chemistry (1991), 56(3), 1210-17
 CODEN: JOCEAH; ISSN: 0022-3263
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 114:61668
 AB Alkylation of enamines and enamine salts by benzylic acid and (β -haloethyl)aryl halides, resp., followed by acidic cyclodehydration and dehydrogenation provides an efficient synthetic approach to a wide range of polycyclic aromatic compds. of diverse structural types. Specific polycyclic hydrocarbons synthesized by this route include benzo[a]- and benzo[c]fluorene, 7H-dibenzo[c,g]-13H-dibenzo[a,i]- and 13H-dibenzo[a,g]fluorene, 15H-tribenzo[a,c,i]fluorene, dibenzo[b,de]chrysene, benzo[ist]pentaphene, indeno[1,2-b]fluorene, fluoro[3,4-c]fluorene, octahydrodibenz[a,j]anthracene, dibenz[a,j]anthracene, octahydrodibenz[a,h]anthracene, dibenz[a,h]anthracene, plicene, benzo[c]picene, 1H-benz[bc]aceanthrylene, and 4H-cyclopenta[def]chrysene. This method with appropriate modifications appears to be potentially broader in scope than established traditional methods of polycyclic hydrocarbon synthesis.
 IT 130800-09-8P 130800-15-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and cyclodehydration of)
 RN 130800-09-8 CAPLUS
 CN Cyclohexanone, 2,2'-[1,5-naphthalenediylbis(methylene)]bis- (CA INDEX NAME)

L51 ANSWER 124 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



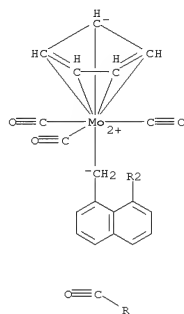
OS.CITING REF COUNT: 57 THERE ARE 57 CAPLUS RECORDS THAT CITE THIS RECORD (59 CITINGS)



RN 130800-15-6 CAPLUS
 CN Cyclohexanone, 2,2'-[(1,5-naphthalenediyl-2,1-ethanediy)]bis- (9CI) (CA INDEX NAME)

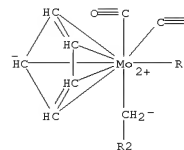
L51 ANSWER 125 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1990:217154 CAPLUS
 DOCUMENT NUMBER: 112:217154
 ORIGINAL REFERENCE NO.: 112:36669a,36672a
 TITLE:
 σ -Bonded organometallics of molybdenum, iron and cobalt derived from 1,8-bis(bromomethyl)naphthalene
 AUTHOR(S): Azam, Kazi A.; Das, Paron C.; Hasan, Mohammad K.; Kabir, Shariff E.
 CORPORATE SOURCE: Dep. Chem., Jahangirnagar Univ., Savar, Bangladesh
 SOURCE: Indian Journal of Chemistry, Section A: Inorganic, Physical, Theoretical & Analytical (1989), 28A(10), 906-8
 CODEN: IJCADU; ISSN: 0376-4710
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 112:217154
 AB The monoanionic metal carbonylate, Na [Mo(η^5 -C₅H₅)(CO)₃] reacts with 1,8-bis(bromomethyl)naphthalene in refluxing THF to give the σ -bonded [C₁₀H₆(CH₂)₂(Mo(η^5 -C₅H₅)(CO)₃)₂], whereas Na[Fe(η^5 -C₅H₅)(CO)₂] and Na[Co(CO)₄] react with the ligand at room temperature to afford the σ -bonded [C₁₀H₆(CH₂)₂(Fe(η^5 -C₅H₅)(CO)₂)₂] and [C₁₀H₆(CH₂)₂(Co(CO)₄)₂], resp. The complexes have been characterized by IR, PMR and mass spectra.
 IT 126939-32-0P 126939-33-1P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 126939-32-0 CAPLUS
 CN Molybdenum, hexacarbonylbis(η^5 -2,4-cyclopentadien-1-yl)[μ -[1,8-naphthalenediylbis(methylene)]di- (9CI) (CA INDEX NAME)

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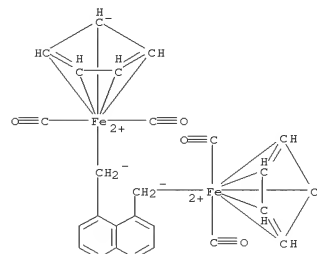


L51 ANSWER 125 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

PAGE 2-A



RN 126939-33-1 CAPLUS
 CN Iron, tetracarbonylbis(η^5 -2,4-cyclopentadien-1-yl)[μ -[1,8-naphthalenediylbis(methylene)]di- (9CI) (CA INDEX NAME)



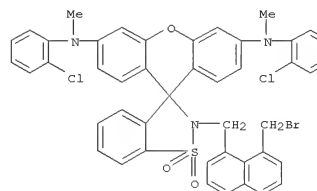
L51 ANSWER 126 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1989:644432 CAPLUS
 DOCUMENT NUMBER: 111:244432
 ORIGINAL REFERENCE NO.: 111:40387a,40390a
 TITLE:
 Thermal recording material containing arylmethane color formers
 INVENTOR(S): Ellis, Ernest W.
 PATENT ASSIGNEE(S): Polaroid Corp., USA
 SOURCE: U.S., 12 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4839335	A	19890613	US 1987-102126	19870928
PRIORITY APPLN. INFO.: US 1987-102126 19870928				

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 111:244432; MARPAT 111:244432
 GI For diagram(s), see printed CA issue.
 AB A thermal recording material contains in a heat-sensitive color-forming layer a colorless di-or triarylmethane compound having the structure I
 [DRL
 = II or III; n = 0 or 1; R = (substituted)CH₂ or C₂H₄; L = a displaceable group, X = CO, SO₂, CH₂, or (substituted) C₂H₄; Y = CO, SO₂, sulfinyl, or (substituted) CH₂ or C₂H₄ provided that when X is CH₂, Y, if present, is CO, SO₂, or sulfinyl; Z, Z1 = a moiety to complete the auxochromophoric system of a di-or triarylmethane dye when the N atom is not attached to the meso C atom and when taken together represent a bridged moiety to complete the auxochromophoric system of a bridged triarylmethane dye when the N atom is not attached to the meso C atom, provided that if Z and Z1 have a N atom in the auxochromic portion, then Y must be CH₂ or be absent with N and D being directly bonded; B = a (substituted) carbocyclic ring or heterocyclic ring; E = H, an electron-donating or withdrawing group, or a group that undergoes fragmentation upon heating] and undergoing, upon heating, irreversible intramol. alkylation of the N atom with color formation. Coloration can be achieved without the need to transfer a reagent or to contact 2 reagents, and because coloration can be achieved at moderately elevated temperature, any conventional heating means for effecting
 imagewise heating can be employed for recording.
 IT 123852-61-9
 RL: USES (Uses)
 (heat-sensitive color-forming layers containing, for thermal printing materials)
 RN 123852-61-9 CAPLUS
 CN Spiro[1,2-benzisothiazole-3(2H),9'-[9H]xanthene]-3',6'-diamine, 2-[[8-(bromomethyl)-1-naphthalenyl]methyl]-N3',N6'-bis(2-chlorophenyl)-N3',N6'-dimethyl-, 1,1-dioxide (CA INDEX NAME)

L51 ANSWER 126 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT

L51 ANSWER 127 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1989:632775 CAPLUS
DOCUMENT NUMBER: 111:232775
ORIGINAL REFERENCE NO.: 111:39669a,39672a
TITLE: Preparation of fused-ring fulgides and fulgimides as photochromic substances
INVENTOR(S): Tanaka, Takashi; Imura, Satoshi; Kida, Yasuji
PATENT ASSIGNEE(S): Tokuyama Soda Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 98 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 316179	A2	19890517	EP 1988-310608	19881110
EP 316179	A3	19901212		
EP 316179	B1	19940119		
R: DE, FR, IT				
JP 01052778	A	19890228	JP 1987-282131	19871110
PRIORITY APPLN. INFO.:			JP 1987-282131	A 19871110
			JP 1987-283116	A 19871111
			JP 1988-80250	A 19880402
			JP 1987-133370	A1 19870530

OTHER SOURCE(S): MARPAT 111:232775
GI For diagram(s), see printed CA issue.
AB The title compds. [I; R1 = (un)substituted hydrocarbyl, heterocyclyl; X = O, R2N; R2 = H, alkyl, aryl, R3B2nA2mB1A1, R4A3; A1, A2, A3 = alkylene, alkylidene, (alkyl)cycloalkylene; B1, B2 = O, CO, CO2, O2C, OCO2, CONH, NHCO; R3 = (un)substituted alkyl, naphthyl(alkyl); R4 = halo, cyano, NO2, (un)substituted naphthyl; Y = atoms to complete a fused, (un)substituted (hetero)aromatic ring; Z = atoms to complete an (un)substituted spiroadamantane or spironorbornane ring; m, n = 0, 1; when m = 0, n = 0] were prepared as photochromic substances with long half-life, suitable

for incorporation into contact lenses. Thus, (2-adamantyldiene)[1-(3-thienyl)ethylidene]succinic anhydride and H2NCH2CO2Me were heated 2 h at 50° in PhMe to give a product which was successively reflexed in AcCl and then in o-Cl2C6H4 to give 27% thienoisoindole-dione II. A mixture of II 0.5, poly(Me methacrylate) 10, and C6H6 100 weight parts was cast into a 0.1 mm film which had an initial absorbance of 0.62 at 535 nm after 60 s exposure to UV light from a Xe lamp. The half-life of the absorbance was 38 h under continuous

irradiation. The absorbance half-life was significantly extended by incorporation of com. UV stabilizers in the film.

IT 123804-28-4P 123804-33-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as photochromic substance)

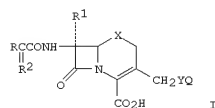
RN 123804-28-4 CAPLUS
CN Spiro[8H-thieno[2,3-f]isoindole-8,2'-tricyclo[3.3.1.1^{3,7}]decane]-5,7(6H,7aH)-dione, 2-bromo-6-[2-(5,7-dimethyl-1-naphthalenyl)ethyl]-4-methyl- (CA INDEX NAME)

L51 ANSWER 128 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1988:570128 CAPLUS
DOCUMENT NUMBER: 109:170128
ORIGINAL REFERENCE NO.: 109:28207a,28210a
TITLE: Cephalosporins, process for their preparation and pharmaceutical compositions useful as antibacterials
INVENTOR(S): Bertrandie, Alain Michel; Bird, Thomas Geoffrey
PATENT ASSIGNEE(S): Colerick; Jung, Frederic Henry
SOURCE: ICI-Pharma S. A., Fr.
Eur. Pat. Appl., 27 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 269298	A2	19880601	EP 1987-309852	19871106
EP 269298	A3	19891129		
EP 269298	B1	19941019		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 63301887	A	19881208	JP 1987-292235	19871120
US 5114933	A	19920519	US 1987-124213	19871123
US 5348951	A	19940920	US 1991-755618	19910905
PRIORITY APPLN. INFO.:			EP 1986-402592	A 19861121
			US 1987-124213	A3 19871123

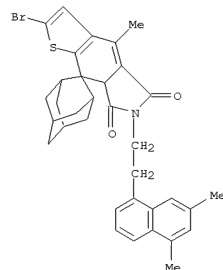
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 109:170128
GI

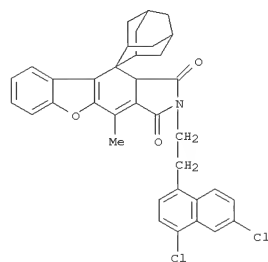


AB Title compds. I [X = S, O, CH2, SO; R = (un)substituted 2-aminothiazol-4-yl, 2-aminooxazol-4-yl, 5-aminoisothiazol-3-yl, 5-amino-1,2,4-thiazol-3-yl, etc.; R1 = H, MeO, HCONH; R2 = HON, Cl-6 alkyloxyimino, C3-8 cycloalkyloxyimino, CH2, PhCH, etc.; Y = covalent bond, or a linker to a benzene or heterocyclyl, etc.; Q = (un)substituted benzene, naphthyl, 5-6-membered heterocyclyl, etc.] and their salts, were prepared To a suspension of the appropriate 7-substituted 3-(aminomethyl)ceph-3-em-4-carboxylic acid in MeOH at pH 5.5-6.0 was added 3,4-(HO)2C6H3CHO and then MeBH3CN to give I. I [X = S, R = 2-aminothiazol-4-yl, R1 = H, R2 = ClCH2CH2, Y = CH2NH, Q = 3,4-(HO)2C6H3] (II) prepared as above in 57% yield evaluated in vitro against Streptococcus pyogenes had a min. inhibitory concentration of 0.008 µL/mL. I were tested

L51 ANSWER 127 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 123804-33-1 CAPLUS
CN Spiro[10H-benzofuro[2,3-f]isoindole-10,2'-tricyclo[3.3.1.1.3,7]decane]-1,3(2H,10aH)-dione, 2-[2-(4,6-dichloro-1-naphthalenyl)ethyl]-4-methyl- (CA INDEX NAME)



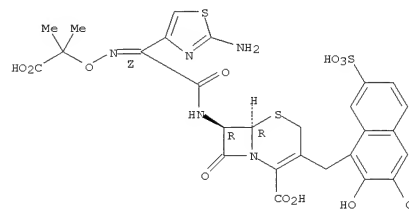
OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD
(9 CITINGS)

L51 ANSWER 128 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
against other bacteria.

IT 117027-97-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, antibiotic)

RN 117027-97-1 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[[2-amino-4-thiazolyl] [(1-carboxy-1-methylethoxy)imino]acetyl]amino]-3-[[2,3-dihydroxy-7-sulfo-1-naphthalenyl)methyl]-8-oxo-, [6R-[6α,7β(2)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



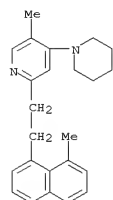
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
(3 CITINGS)

L51 ANSWER 129 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1988:492810 CAPLUS
DOCUMENT NUMBER: 109:92810
ORIGINAL REFERENCE NO.: 109:15481a,15484a
TITLE: Substituted pyridine derivatives, pharmaceutical preparations containing them, and their use in treating ulcers
INVENTOR(S): Hosoi, Masaaki; Nishioka, Ryo; Hioki, Yoshio; Iida, Yoshiaki; Takeshita, Hiroshi; Niiyama, Kenji; Hidaka, Yusuke
PATENT ASSIGNEE(S): Banyu Pharmaceutical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 47 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

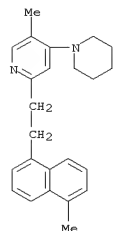
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 264883	A2	19880427	EP 1987-115275	19871019
EP 264883	A3	19900404		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 01131157	A	19890524	JP 1987-264336	19871020
US 4839353	A	19890613	US 1987-110369	19871020
PRIORITY APPLN. INFO.:			JP 1986-248363	A 19861021
			JP 1987-199597	A 19870810

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 109:92810
GI For diagram(s), see printed CA Issue.
AB Pyridine derivs. I [R1 = (un)substituted Ph or naphthyl; X = O, S, CO, CH(OH), NFA (Ra = H, alkyl); Y = alkylene, alkyl (un)substituted vinylene;
R2, R3 = H, alkyl; R4 = H, alkoxy, cycloalkyloxy, alkylthio, aryloxy, cycloalkylthio, aralkyloxy, NRbRc (Rb,Rc = H, alkyl; NRbRc = saturated heterocyclyl optionally with an addnl. hetero atom (O, S, N) and (un)substituted with alkyl); m, n = 0, 1, m and n \neq 0 simultaneously] or their acid addition salts, useful in treating ulcers,
were prepared Wittig reaction of (1-naphthylmethyl)triphenylphosphonium chloride
with 5-methyl-4-piperidino-2-pyridinecarboxaldehyde gave a mixture of
(E)- and (Z)-5-methyl-2-[2-(1-naphthylvinyl)-4-piperidinopyridines [(Z)-II], which was converted into 41% (E)- and 37% (Z)-II hydrochlorides (III). The ED50 of III for gastric acid antiseecretory activity was 1.16 mg/kg in rats. A formulation comprised III 200, lactose 70.3, potato starch 67.9, colloidal silica 12.8 g, and 10% aqueous gelatin; after grinding and drying,
potato starch 64, talc 20, and Mg stearate 2 g were added to give 4000 tablets each containing 50 mcg active compound
IT 115717-62-9P 115717-64-1P 115717-66-3P
115718-74-6P 115718-75-7P 115718-76-8P
115718-77-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREF (Preparation); USES (Uses)

L51 ANSWER 129 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



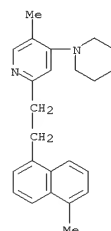
RN 115718-74-6 CAPLUS
CN Pyridine,
5-methyl-2-[2-(5-methyl-1-naphthalenyl)ethyl]-4-(1-piperidinyl)-
, hydrochloride (1:1) (CA INDEX NAME)



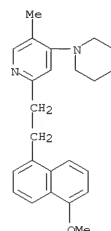
● HCl

RN 115718-75-7 CAPLUS
CN Pyridine,
2-[2-(5-methoxy-1-naphthalenyl)ethyl]-5-methyl-4-(1-piperidinyl)-
, hydrochloride (1:1) (CA INDEX NAME)

L51 ANSWER 129 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(prepn. of, as antiulcer agent)
RN 115717-62-9 CAPLUS
CN Pyridine,
5-methyl-2-[2-(5-methyl-1-naphthalenyl)ethyl]-4-(1-piperidinyl)-
(CA INDEX NAME)

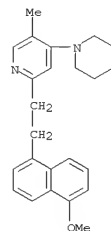


RN 115717-64-1 CAPLUS
CN Pyridine,
2-[2-(5-methoxy-1-naphthalenyl)ethyl]-5-methyl-4-(1-piperidinyl)-
(CA INDEX NAME)



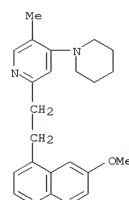
RN 115717-66-3 CAPLUS
CN Pyridine,
5-methyl-2-[2-(8-methyl-1-naphthalenyl)ethyl]-4-(1-piperidinyl)-
(CA INDEX NAME)

L51 ANSWER 129 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



● HCl

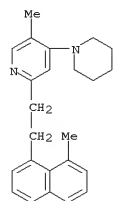
RN 115718-76-8 CAPLUS
CN Pyridine,
2-[2-(7-methoxy-1-naphthalenyl)ethyl]-5-methyl-4-(1-piperidinyl)-
, hydrochloride (1:1) (CA INDEX NAME)



● HCl

RN 115718-77-9 CAPLUS
CN Pyridine,
5-methyl-2-[2-(8-methyl-1-naphthalenyl)ethyl]-4-(1-piperidinyl)-
, hydrochloride (1:1) (CA INDEX NAME)

L51 ANSWER 129 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

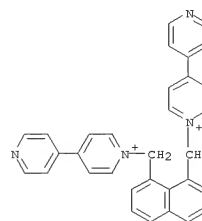


● HCl

OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

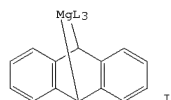
L51 ANSWER 130 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1988:454234 CAPLUS
 DOCUMENT NUMBER: 109:54234
 ORIGINAL REFERENCE NO.: 109:9135a,9138a
 TITLE: peri-Interaction: crystal structure of 1,8-bis(methylene-4,4'-bipyridinium)naphthalene
 AUTHOR(S): Munavalli, S.; Poziomek, E. J.; Day, Cynthia S.
 CORPORATE SOURCE: Res. Dir., U. S. Army Chem. Res. Dev. Eng. Cent., Aberdeen Proving Ground, MD, 21010-5423, USA
 SOURCE: Journal of Molecular Structure (1987), 160(3-4), 311-18
 CODEN: JMOB4; ISSN: 0022-2860

DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 109:54234
 AB Several mol. conformations are possible for the title compound. Although free rotation of the bipyridyl moieties around the C-C bonds is possible, the bulky 4,4'-bipyridyls impose steric hindrance and restrict the free rotation. Examination of the Drieding model of the mol. eliminated those arrangements where considerable overlapping of the bipyridyls occurred. NMR results were not useful in choosing the most likely candidate for the structure from the remaining possibilities. The most probable conformation is shown.
 IT 115410-62-3P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation, crystallog., and conformation of)
 RN 115410-62-3 CAPLUS
 CN 4,4'-Bipyridinium, 1-[[8-([4,4'-bipyridinium]-1-ylmethyl)-1-naphthalenyl]methyl]-, bromide (1:2) (CA INDEX NAME)



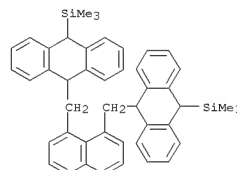
● 2 Br⁻

L51 ANSWER 131 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1988:437850 CAPLUS
 DOCUMENT NUMBER: 109:37850
 ORIGINAL REFERENCE NO.: 109:6411a,6414a
 TITLE: Main group conjugated organic anion chemistry. 3. Application of magnesium-anthracene compounds in the synthesis of Grignard reagents
 AUTHOR(S): Harvey, Stephen; Junk, Peter C.; Raston, Colin L.; Salem, Geoffrey
 CORPORATE SOURCE: Sch. Chem., Univ. West. Australia, Nedlands, 6009, Australia
 SOURCE: Journal of Organic Chemistry (1988), 53(14), 3134-40
 CODEN: JOCEAH; ISSN: 0022-3263
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 109:37850
 GI



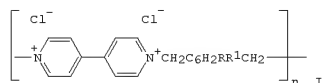
AB Reaction of magnesium arene compds., e.g., I (L = THF), and some silylanthracene, and/or tertiary amine analogs, with benzylic and allylic chlorides or bromides, and (Me3Si)3CCl, afford Grignard reagents in modest to high yield for chlorides, and negligible to high yield for the bromides, in THF, PhMe, and hexane at -10 to 20°. Novel benzylic-type Grignard reagents prepared in high yield include those of 9-(chloromethyl)anthracene, 2-(chloromethyl)pyridine and 8-(chloro- or bromomethyl)quinoline, and poly-Grignard reagents derived from 1,8-bis(chloromethyl)naphthalene, 2,2'-bis(chloromethyl)-1,1'-binaphthyl, and 1,3,5-tris(chloro- or bromomethyl)benzene. Grignard reagent formation occurs via electron-transfer reactions. Aryl and alkyl halides yield mainly products derived from addition of the halide across the 9,10-positions of the anthracenes, via nucleophilic substitution or collapse of a diradical cage.
 IT 114694-03-0P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 114694-03-0 CAPLUS
 CN Silane, [[1,8-naphthalenediyl]bis[methylene(9,10-dihydro-10,9-anthracenediyl)]]bis[trimethyl- (9CI) (CA INDEX NAME)

L51 ANSWER 131 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

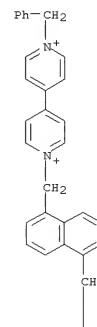
L51 ANSWER 132 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1987:599038 CAPLUS
 DOCUMENT NUMBER: 107:199038
 ORIGINAL REFERENCE NO.: 107:31951a,31954a
 TITLE: Photoreduction and electroredox behavior of aromatic polyviologens
 AUTHOR(S): Liang, Zhaoxi; Liu, Weiqu; Li, Wen; Li, Manfu
 CORPORATE SOURCE: Inst. Polym. Sci., Zhongshan Univ., Canton, Peop. Rep.
 SOURCE: China
 Polymer Materials Science and Engineering (1987), 57, 593-7
 CODEN: PMSEDG; ISSN: 0743-0515
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



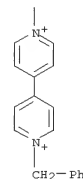
AB The title polymers I (R, R1 = H, Me, iso-Pr, MeO, Cl) were synthesized from 4,4'-bipyridyl and the appropriate dichlorides and their photoredn. in iso-PrOH aqueous solution and electroredox behavior were investigated. The dilute solns. were UV-irradiated with a 250-W high-pressure Hg lamp and the radical cations were monitored with a UV-visible spectrophotometer at 25° while the reduction potentials were determined with a polarog. analyzer using a Hg drop working electrode. In the presence of excess iso-PrOH the initial photoredn. of aromatic polyviologens followed the pseudosecond-order reaction law, with rates of photoredn. varying markedly with structure of the aromatic rings. The 1st and 2nd reduction potentials of the polymers and bisviologen model compds. were determined and showed a marked dependence on structure of the arylene segment.
 IT 111282-81-6
 RL: USES (Uses)
 (photoredn. and electroredox properties of, as model for aromatic polyviologens)
 RN 111282-81-6 CAPLUS
 CN 4,4'-Bipyridinium, 1,1'-[1,5-naphthalenediylbis(methylene)]bis[1'-(phenylmethyl)- (9CI) (CA INDEX NAME)

L51 ANSWER 132 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

PAGE 1-A

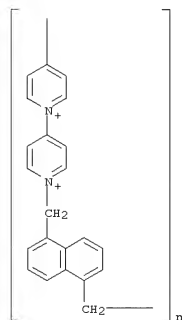


PAGE 2-A



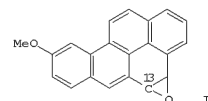
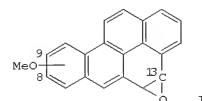
IT 111236-71-6
 RL: USES (Uses)
 (photoredn. and electroredox properties of, in dilute isopropanol)
 RN 111236-71-6 CAPLUS
 CN Poly([1,4'-bipyridinium]-4,1'-diylmethylene-1,5-naphthalenediylmethylene dichloride) (9CI) (CA INDEX NAME)

L51 ANSWER 132 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

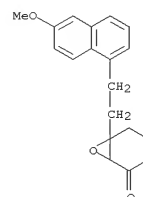


● 2 Cl⁻

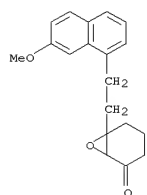
L51 ANSWER 133 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1986:33954 CAPLUS
 DOCUMENT NUMBER: 104:33954
 ORIGINAL REFERENCE NO.: 104:5569a,5572a
 TITLE: Methoxybenzo[a]pyrene 4,5-oxides labeled with carbon-13: electronic effects in the NIH shift
 AUTHOR(S): Silverman, I. Robert; Daub, Guido H.; VanderJagt, David L.
 CORPORATE SOURCE: Dep. Chem., Univ. New Mexico, Albuquerque, NM, 87131, USA
 SOURCE: Journal of Organic Chemistry (1985), 50(26), 5550-6
 CODEN: JOCEAH; ISSN: 0022-3263
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 104:33954
 GI



AB Labeled methoxybenzopyrene oxides I (MeO in 8- or 9-position) and II were synthesized in yields of 15% each from unlabeled precursors. 13C NMR anal. of the conversion of the 4,5-oxides to 4-phenols and 5-phenols (NIH shift) revealed a very strong electronic effect of a 9-methoxy substituent, which gave only the 4-phenol, and a significant but weaker effect of an 8-methoxy substituent, which gave both phenols with the 5-phenol predominating.
 IT 92096-73-6P 99417-02-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and cyclization of)
 RN 92096-73-6 CAPLUS
 CN 7-Oxabicyclo[4.1.0]heptan-2-one, 6-[2-(6-methoxy-1-naphthalenyl)ethyl]- (CA INDEX NAME)

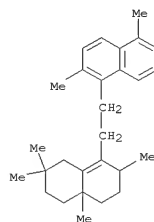


L51 ANSWER 133 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
 RN 99417-02-4 CAPLUS
 CN 7-Oxabicyclo[4.1.0]heptan-2-one, 6-[2-(7-methoxy-1-naphthalenyl)ethyl]-
 (CA INDEX NAME)



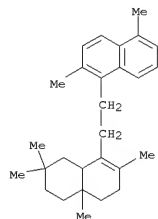
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS
 RECORD (1 CITINGS)

L51 ANSWER 134 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1985:64712 CAPLUS
 DOCUMENT NUMBER: 102:64712
 ORIGINAL REFERENCE NO.: 102:10139a,10142a
 TITLE: Polycyclic aromatic hydrocarbons in Australian coals.
 II. Novel tetracyclic components from Victorian
 brown coal
 AUTHOR(S): Chaffee, Alan L.; Strachan, Michael G.; Johns, R. B.
 CORPORATE SOURCE: Dep. Org. Chem., Univ. Melbourne, Parkville, 3052,
 Australia
 SOURCE: Geochimica et Cosmochimica Acta (1984), 48(10),
 2037-43
 CODEN: GCACAK; ISSN: 0016-7037
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Gas chromatog.-mass spectrometric anal. of a polycyclic aromatic
 hydrocarbon
 fraction of a Victoria brown coal sample has revealed the presence of a
 novel series of tetracyclic triterpenoid derived components. The base
 peak of their mass spectra, at m/z 169, suggests an 8,14-seco (C-ring
 cleaved) structural configuration with the triterpenoid derived A- and
 B-rings fully aromatized. Photochem. induced or acid-catalyzed processes
 are seen as 2 possibilities to account for the diagenetic formation of
 these compds.
 IT 94613-96-4 94613-97-5
 RL: USES (Uses)
 (in brown coal, of Australia)
 RN 94613-96-4 CAPLUS
 CN Naphthalene, 8-[2-(2,5-dimethyl-1-naphthalenyl)ethyl]-1,2,3,4,4a,5,6,7-
 octahydro-2,2,4a,7-tetramethyl- (CA INDEX NAME)



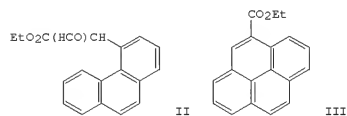
RN 94613-97-5 CAPLUS
 CN 24,25-Dinor-8,14-secooleana-1,3,5,7,9,13-hexaene (9CI) (CA INDEX NAME)

L51 ANSWER 134 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

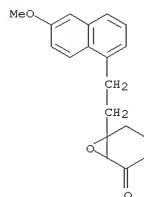


OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS
 RECORD (11 CITINGS)

L51 ANSWER 135 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1984:610706 CAPLUS
 DOCUMENT NUMBER: 101:210706
 ORIGINAL REFERENCE NO.: 101:31915a,31918a
 TITLE: Methanesulfonic acid. A useful cyclizing acidic
 reagent
 AUTHOR(S): Leon, Alberto A.; Daub, Guido; Silverman, I. Robert
 CORPORATE SOURCE: Dep. Chem., Univ. New Mexico, Albuquerque, NM, 87131,
 USA
 SOURCE: Journal of Organic Chemistry (1984), 49(23), 4544-5
 CODEN: JOCEAH; ISSN: 0022-3263
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 101:210706
 GI

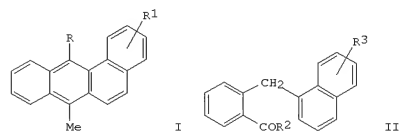


AB The title compound (I) readily causes cyclization of carbonyl compds. at
 room temperature to produce aromatic rings. The substrate is added to
 neat I or a
 solution of I in CH2Cl2 is added to a solution of the substrate in
 CH2Cl2 and
 the mixture stirred 20-24 h. By the 2nd method phenanthreneacetate II
 gave
 94% pyrenecarboxylate III.
 IT 92096-73-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclization of, by methanesulfonic acid)
 RN 92096-73-6 CAPLUS
 CN 7-Oxabicyclo[4.1.0]heptan-2-one, 6-[2-(6-methoxy-1-naphthalenyl)ethyl]-
 (CA INDEX NAME)



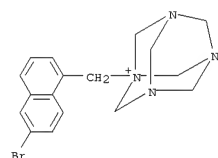
L51 ANSWER 135 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS
RECORD
(5 CITINGS)

L51 ANSWER 136 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1983:487790 CAPLUS
DOCUMENT NUMBER: 99:87790
ORIGINAL REFERENCE NO.: 99:13533a,13536a
TITLE: Synthesis of nuclear monobromobenz[a]anthracenes
AUTHOR(S): Newman, Melvin S.; Prabhu, V. S.; Veeraraghavan, S.
CORPORATE SOURCE: Chem. Dep., Ohio State Univ., Columbus, OH, 43210,
USA
SOURCE: Journal of Organic Chemistry (1983), 48(17), 2926-8
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 99:87790
GI



AB The preparation of benzantracenes I (R = H, R1 = 1-Br, 3-Br; R = Me, R1 = 2-Br, 3-Br) is described. The Br atoms in the intermediates were not removed in redns. using HI-H3PO2 and SnCl2-HCl. However, treating II (R2 = OH, R3 = 6-Br, 8-Br) with excess MeLi gave much Br loss. When the corresponding acid chlorides were treated with Me2CuLi, high yields of the desired ketones, II (R2 = Me, R3 = 6-Br, 8-Br), were obtained.
IT 86456-70-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
RN 86456-70-4 CAPLUS
CN 3,5,7-Triaza-1-azoniatricyclo[3.3.1.1.3,7]decane, 1-[(6-bromo-1-naphthalenyl)methyl]-, bromide (1:1) (CA INDEX NAME)

L51 ANSWER 136 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



● Br -

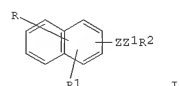
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS
RECORD
(1 CITINGS)

L51 ANSWER 137 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1983:144974 CAPLUS
DOCUMENT NUMBER: 98:144974
ORIGINAL REFERENCE NO.: 98:22101a,22104a
TITLE: Dyeing or printing fabrics
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

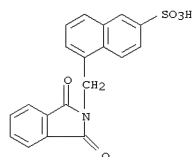
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57149572	A	19820916	JP 1981-32156	19810305

PRIORITY APPLN. INFO.: JP 1981-32156 19810305

GI



AB Naphthalene derivs. I, where Z1 is benzene or naphthalene ring, R is H, Cl-4 alkyl, or OR3, R2 is H, SO3R4, or CO2R4, R1 is SO3R4 or CO2R4, Z is O, CO2, CH2O, CH2OCH2, CH2CH2, CH2CO2, OCH2CH2CO2, OCH2CH2O, CO2CH2CH2CO2, CH2OCH2CH2CO2, SO2NH, CONH, or CH2N(CO)2, R3 is H or Cl-12 alkyl, and R4 is Na, K, NH4, or an organic amine salt, are useful as leveling or fixing agents for dyeing or printing fabrics. Thus, Sumikaron Navy Blue S-2GL Cake 30, disodium 6,6'-(ethylenedioxy)bis(5-methyl-2-naphthalenesulfonate) (II) [85182-17-8] 67, Na lignin sulfonate 3, and H2O 100 parts were mixed, particularized, and dried to give dye particles (A). A polyester tropical (10 g) was dyed with a liquor containing H2O 50, 48% AcOH 0.01, and a leveling agent 0.025 mL and 0.5 g A particles for 30 min at 130° to give a navy blue fabric without tarring, whereas tarring occurred for a fabric dyed with a similar composition containing Na naphthalenesulfonate-formaldehyde condensate instead of II.
IT 85182-16-7
RL: USES (Uses)
(leveling agents, for dyeing of polyester fibers with disperse dyes)
RN 85182-16-7 CAPLUS
CN 2-Naphthalenesulfonic acid, 5-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, sodium salt (1:1) (CA INDEX NAME)

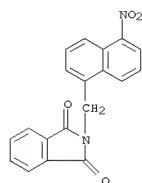


● Na

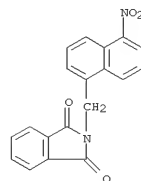
L51 ANSWER 138 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1983:106924 CAPLUS
 DOCUMENT NUMBER: 98:106924
 ORIGINAL REFERENCE NO.: 98:16289a,16292a
 TITLE: Reaction of 1-(aminomethyl)-5-nitronaphthalene with dimethyl azodicarboxylate
 AUTHOR(S): Lisitsyn, V. N.; Bolkvadze, L. I.
 CORPORATE SOURCE: Mosk. Khim.-Tekhnol. Inst., Moscow, USSR
 SOURCE: Khimiya i Tekhnologiya Krasheniya, Sintez Krasitelei i Polimernykh Materialov (1981) 36-41
 CODEN: KTRMDS
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 98:106924
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB 1-Nitronaphthalene reacted with paraformaldehyde and concentrated HCl in the presence of ZnCl₂ at 65-70° to give 56.4% 1-(chloromethyl)-5-nitronaphthalene and then with K phthalimide to give 80.6% N-[(5-nitro-1-naphthyl)methyl]phthalimide, which was cleaved with N₂H₄·H₂O in refluxing EtOH to give 97.0% title naphthalene derivs. (I; R = NO₂) as the hydrochloride. I (R = H, NO₂) reacted with MeO₂CN:CO₂Me to give 90.0-1.5% yields of the corresponding (naphthylmethyl)amides (II; Z = N;N) (III), which was reduced with N₂H₄·H₂O to give 82.4-90.0% II (Z = N;N). Diels-Alder reaction of III (same R) with cyclopentadiene and Ph(CH₂)₂Ph gave 69.7-73.8% diazobicycloheptene derivs. IV and 87.3-93.3% tetrahydropyrazine derivs. V, resp. Fusing PhCH₂(NHCONH)CH₂Ph and II (R = H, Z = N;N) at 160° gave the corresponding N,N'-bis(arylmethyl)ureas in 75.0-6.5% yield. (PhCH₂NH)CO was also prepared in 16.7% yield from PhCH₂NH₂ and MeO₂CNHNHCO₂Me.
 IT 83263-23-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and cleavage of, with hydrazine hydrate)
 RN 83263-23-4 CAPLUS
 CN 1H-Isoindole-1,3(2H)-dione, 2-[(5-nitro-1-naphthalenyl)methyl]- (CA INDEX NAME)



L51 ANSWER 139 OF 176 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1982:562528 CAPLUS
 DOCUMENT NUMBER: 97:162528
 ORIGINAL REFERENCE NO.: 97:27097a,27100a
 TITLE: Reaction of 1-aminomethyl-5-nitronaphthalene with dimethyl azodicarboxylate
 AUTHOR(S): Lisitsyn, V. N.; Bolkvadze, L. I.
 CORPORATE SOURCE: USSR
 SOURCE: Khimiya Elementoorgan. Soedin., Gor'kii (1981) 36-41
 From: Ref. Zh., Khim. 1982, Abstr. No. 14Zh244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB Title only translated.
 IT 83263-23-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and cleavage of, with hydrazine,
 (aminomethyl)nitronaphthalene
 by)
 RN 83263-23-4 CAPLUS
 CN 1H-Isoindole-1,3(2H)-dione, 2-[(5-nitro-1-naphthalenyl)methyl]- (CA INDEX NAME)



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COST IN U.S. DOLLARS

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1981.83

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE
ENTRY

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